



279459

**SITE ASSESSMENT REPORT
FOR
MIDWEST METALLICS
SUMMIT, COOK COUNTY, ILLINOIS
TDD: S05-0001-025
PAN: 0J2501SIXX**

May 16, 2000

Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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1. Introduction

The Emergency Response Branch (ERB) of the United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) to conduct site assessment activities at the Midwest Metallics L.L.P. (Midwest Metallics) site under Technical Direction Document (TDD) S05-0001-025. START activities included reviewing available site data; preparing and implementing a site safety plan; collecting environmental samples; securing analytical services; documenting on-site conditions; conducting on-site air monitoring; evaluating threats to human health and the environment based on analytical results from the collected samples; and providing estimated costs for possible response alternatives. The site assessment was performed in accordance with the criteria listed under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and presented in Title 40 of the Code of Federal Regulations (40 CFR), Section 300.415, paragraph (b)(2). These criteria are used to evaluate on-site conditions and potential threats to human health and the environment. This report summarizes START site assessment activities.

2. Site Background

2.1 Site Description

The site is located at 7655 West 59th Street in the city of Summit, Cook County, Illinois. Approximately 23 acres in size, the site is located approximately 10 miles southwest of Chicago, Illinois; is located in the west-central section of Summit; and has geographic coordinates of latitude 41°46'39.2" N, longitude 87°49'13.5" W (Figure 2-1). The site currently houses an inactive automobile scrap metal processing/recycling facility and two active trucking facilities. The site is bordered by an industrial complex and 59th Street to the north; by railroad tracks and an automobile junkyard to the east; and by railroad tracks and a railroad yard to the south and west. Although the site is located in an industrial neighborhood, there is significant residential development less than 1 mile to the east of the site. The perimeter of the site is fenced; however, gaps were noted in the fencing at the southeastern and southwestern corners of the site, and several gates around the site's perimeter were open.

Key site features include the main autofluff pile, a dilapidated shed, two sets of abandoned railroad tracks, the former materials processing/shredder area, a surface water impoundment located along the northern edge of the site, and two trucking/warehouse buildings (Figure 2-2). The main autofluff pile extends along the site's eastern border in a north-northeast/south-southwest direction and measures approximately 875 feet along its longest axis. The pile ranges in height from 25 to 45 feet above ground surface and in width from 125 to 250 feet. Two separate trucking operations are active at the site. These companies have leased discrete areas in the west-central and northeastern sections of the site to conduct their operations. An abandoned railroad track runs along the site's western boundary in a north-northwest/south-southeast direction. A second set of abandoned railroad tracks runs along a northeast/southwest axis, bisecting the site into approximate halves. This second set of tracks extends across the site and runs just north of the main autofluff pile. Generally, ground elevations to the south of these tracks are 5 to 10 feet higher than elevations to the north of the tracks.

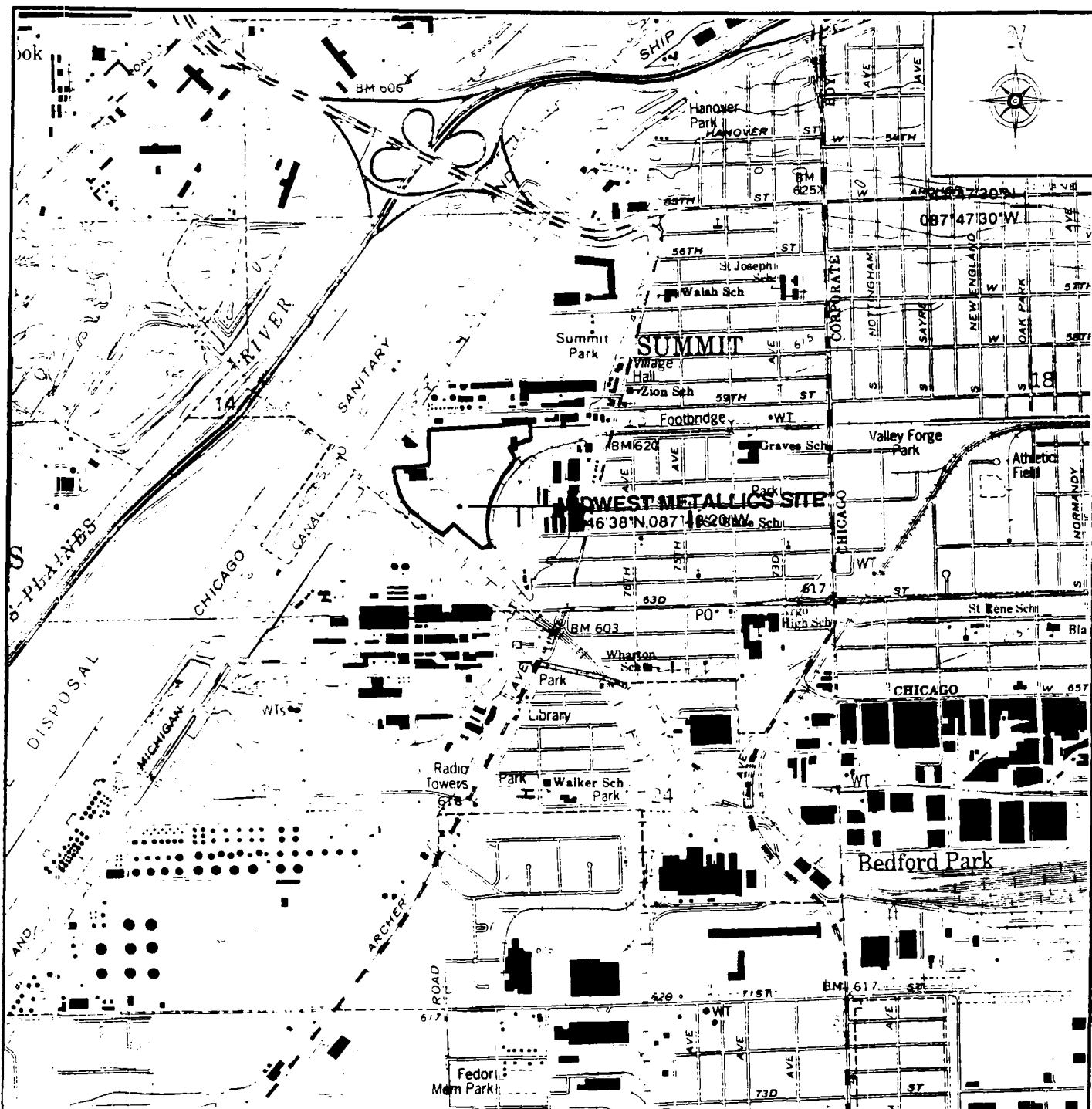
The dilapidated shed is located at the northwestern sector of the main autofluff pile. Several small piles of material that appear to be reprocessed autofluff are located close to the shed. A surface impoundment, measuring approximately 800 feet in length and 90 feet in width, is located along the northern boundary of the site. Drainage patterns at the site are generally towards the north and northeast. Other notable features discovered during the site reconnaissance include pools of standing liquids along the northern and eastern edges of the main autofluff pile, an apparent storage area for reprocessed autofluff at the west-central portion of the site, and an abandoned railcar at the southwestern corner of the site. The storage area measures approximately 500 feet in length, has an average width of 125 feet, and is approximately 5 feet high.

2.2 Site History

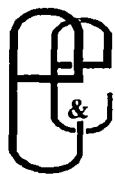
In researching the Midwest Metallica site, U.S. EPA Region 5 arranged to have the U.S. EPA's Environmental Science Division (ESD), in conjunction with Lockheed Environmental Systems & Technologies Company, prepare an aerial photographic analysis of the site. The photographic analysis included the review and analysis of aerial photographs taken of the site area from 1976 through 1998.

From the photographic analysis, it was determined that site activities related to the automotive recycling operation began before April 1976. U.S. EPA ESD determined that vehicles were delivered to the site and staged for processing. Vehicle processing involved the compaction, stacking, shredding and reshredding of the vehicles.

The surface water impoundment along the site's northern boundary first appears in the 1980 aerial photograph, while the 1987 aerial photograph contains the first appearance of the storage pile that evolves into the main autofluff pile. A review of the photographs included in the Aerial Photographic Analysis Report shows the increase in size of the main autofluff pile and the surface water impoundment located at the northern end of the site over time. The sequence of aerial photographs also reveals the evolution/emergence of the two on-site buildings.



Quadrangle Location

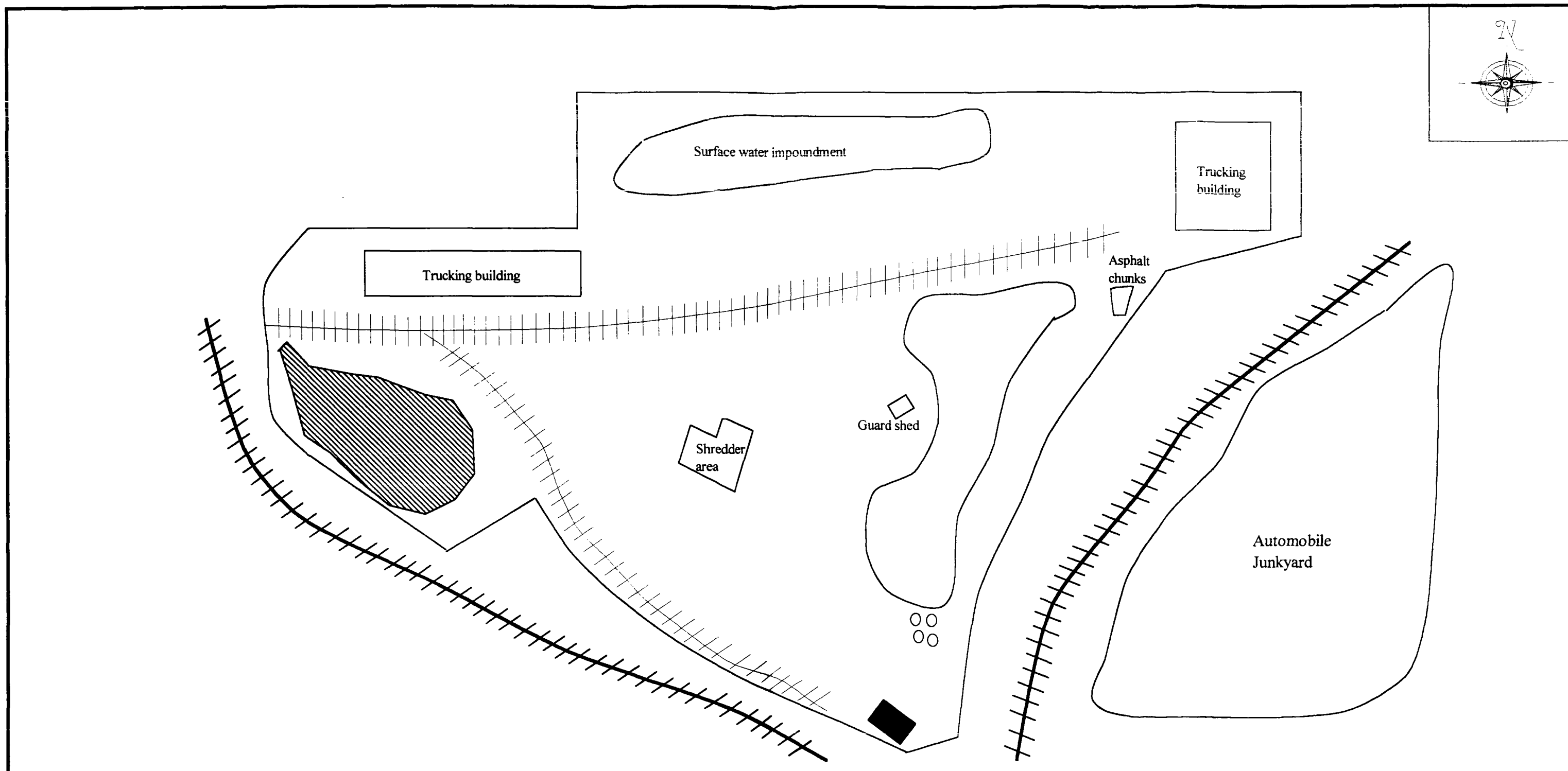


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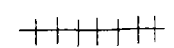
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| | | | |
|--------|--|---------|------------------|
| TITLE | Site Location Map | FIGURE | 2-1 |
| SITE | Midwest Metallics | SCALE | 1:24,000 |
| CITY | Summit | STATE | Illinois |
| SOURCE | USGS Topographic Map 7.5 Minute Series - Berwyn, IL. Quadrangle | | TDD |
| | | | S05-0001-025 |
| | | DATE | 1963 |
| | | REVISED | 1972, 1980, 1993 |



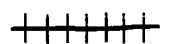
Legend



Inactive railroad tracks



Reprocessed autofluff storage area



Active railroad tracks



Main autofluff pile



Abandoned railcar



Concrete-filled forms



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| | | | |
|--------|-------------------------------|--------|--------------|
| Title | Site Features Map | Figure | 2-2 |
| Site | Midwest Metalics | Scale | Not to scale |
| City | Summit | State | Illinois |
| Source | Ecology and Environment, Inc. | TDD | S05-0001-025 |
| | | Date | May 2000 |

3. Site Assessment Activities

On March 15, 2000, START members Garth Daley, Marija Simunic, and Randy Earnest arrived at the Midwest Metalics site at approximately 0910 hours to meet U.S. EPA On-Scene Coordinator (OSC) Bradley Benning and conduct the site assessment.

3.1 Site Reconnaissance Activities

After the completion of the health and safety meeting, OSC Benning, with the assistance of an aerial photograph and a topographic map of the site, began briefing START of the site's history and discussed possible sample collection procedures. Following the briefing, START and OSC Benning began a reconnaissance of the main autofluff pile at approximately 0945 hours. The reconnaissance was conducted by walking around the pile in a counterclockwise direction beginning south of the shed and continuing to the south-central section of the pile. Because of the apparent closeness of the main autofluff pile to the site's eastern fence, START and OSC Benning reversed direction and continued the reconnaissance walk. Wherever an indentation was noticed in the surface of the pile, that location was preliminarily marked for sample collection. The reconnaissance walk continued along the western edge of the pile until START and OSC Benning arrived at the location of a ramp leading to the top of the pile. It was then decided that START should establish a sample processing area to the south of the shed, design a sample identification methodology, and begin collecting samples from the autofluff pile.

Sample collection protocol required that material from each sample location would be placed into two 1-gallon Ziploc® bags for processing. Sample processing involved separating the contents of each Ziploc® bag into two piles, removing noticeable pieces of metal or rubber from the piles, mixing the sorted material from each sample location, and placing the composited material into 16-ounce and 32-ounce sample containers. Based on the completed reconnaissance and the earlier briefing session, START was instructed to collect samples around the base of the main autofluff pile at approximately 200-foot intervals using the pre-selected sample locations as reference locations. START was also to

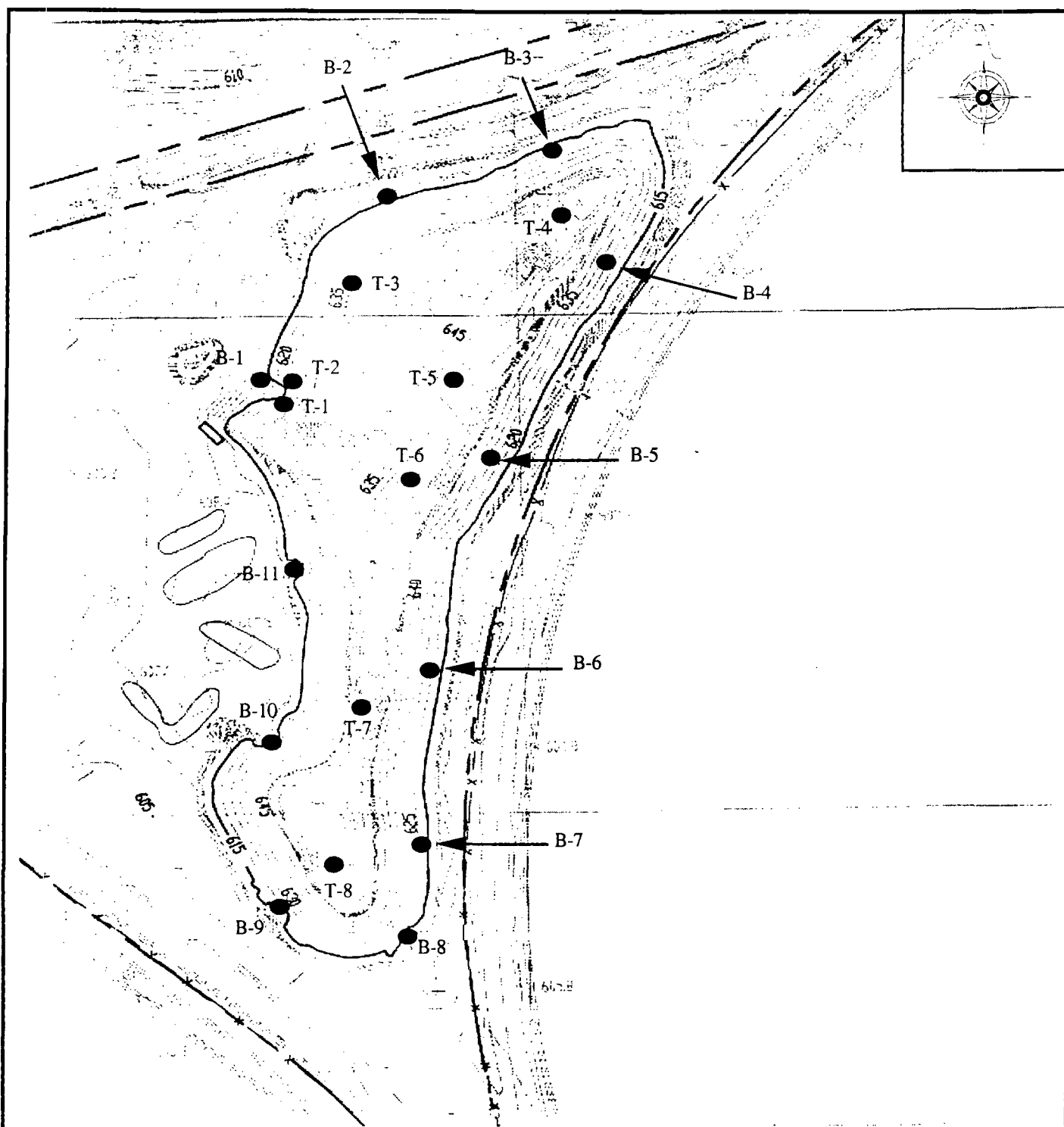
collect at least five samples from the top of the pile, at least two samples from the area to the north of the shed, and a sample from the ramp leading into the former material processing/shredder area. Each collected sample was to be assigned a unique designation, using a combination of a location code and sequential numbers. In the identification system created for the site, the letters B, T, and S were used to identify autofluff samples collected from the base of the main pile, the top of the main pile and other portions of the site, respectively. While START collected and processed samples, OSC Benning planned to continue reconnaissance activities around the site, with the intent of adding additional sample locations as deemed necessary.

3.2 Sample Collection Activities

At 1030 hours, START completed preparations for the sample processing area and began sample collection activities. Eleven samples (B-1 through B-11) were collected along the base of the main autofluff pile between 1040 hours and 1230 hours. During the collection of the basal samples, a sediment sample (SED-1 collected at 1053 hours) and a liquid sample (LC-1 collected at 1123 hours) were also collected at the site. SED-1 was collected from a drainage ditch along the north edge of the pile, while LC-1 was collected along the site's fenceline near the north-northeast portion of the main autofluff pile. Eight additional samples (T-1 through T-8) were collected from the top of the main autofluff pile from 1430 hours to 1535 hours. OSC Benning collected an additional eight samples (S-1 through S-8) from various portions of the Midwest Metallica site between 1230 hours and 1520 hours, concurrently with START sampling. All collected samples were processed by START Simunic for shipment. Duplicate samples of the material collected at sample locations B-6 and T-6 were produced during sample processing as a quality control measure. The approximate locations of the samples collected from the main autofluff pile are shown on Figure 3-1, while the locations of all the collected samples are shown on Figure 3-2.

The second phase of the site assessment activities consisted of surveying each sample location, using a hand-held global-positioning system (GPS) unit, and photo-documenting site conditions. During sample collection, survey flags were placed at each sample location to facilitate the GPS survey. STARTs Daley and Earnest began the GPS survey at approximately 1625 hours with the sample locations on the top of the main autofluff pile. Photodocumentation of each sample location and selected site feature was performed concurrently with the GPS survey. Impending inclement weather forced the suspension of these activities at 1700 hours.

On March 16, 2000, STARTs Daley and Simunic returned to the Midwest Metalics site to complete the GPS survey and photodocumentation activities. All remaining sample locations were located, surveyed, and photographed between 0925 hours and 1150 hours. Photographs were also taken of selected site features. During the GPS survey, an area of magnetic interference was noted between sample locations B-9 and B-10. START was unable to determine the source of the interference. Sample collection details are summarized and presented in Appendix A, while photodocumentation is presented in Appendix B.



Legend

● Sample location

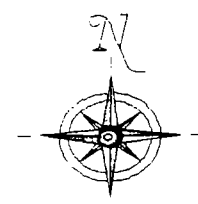
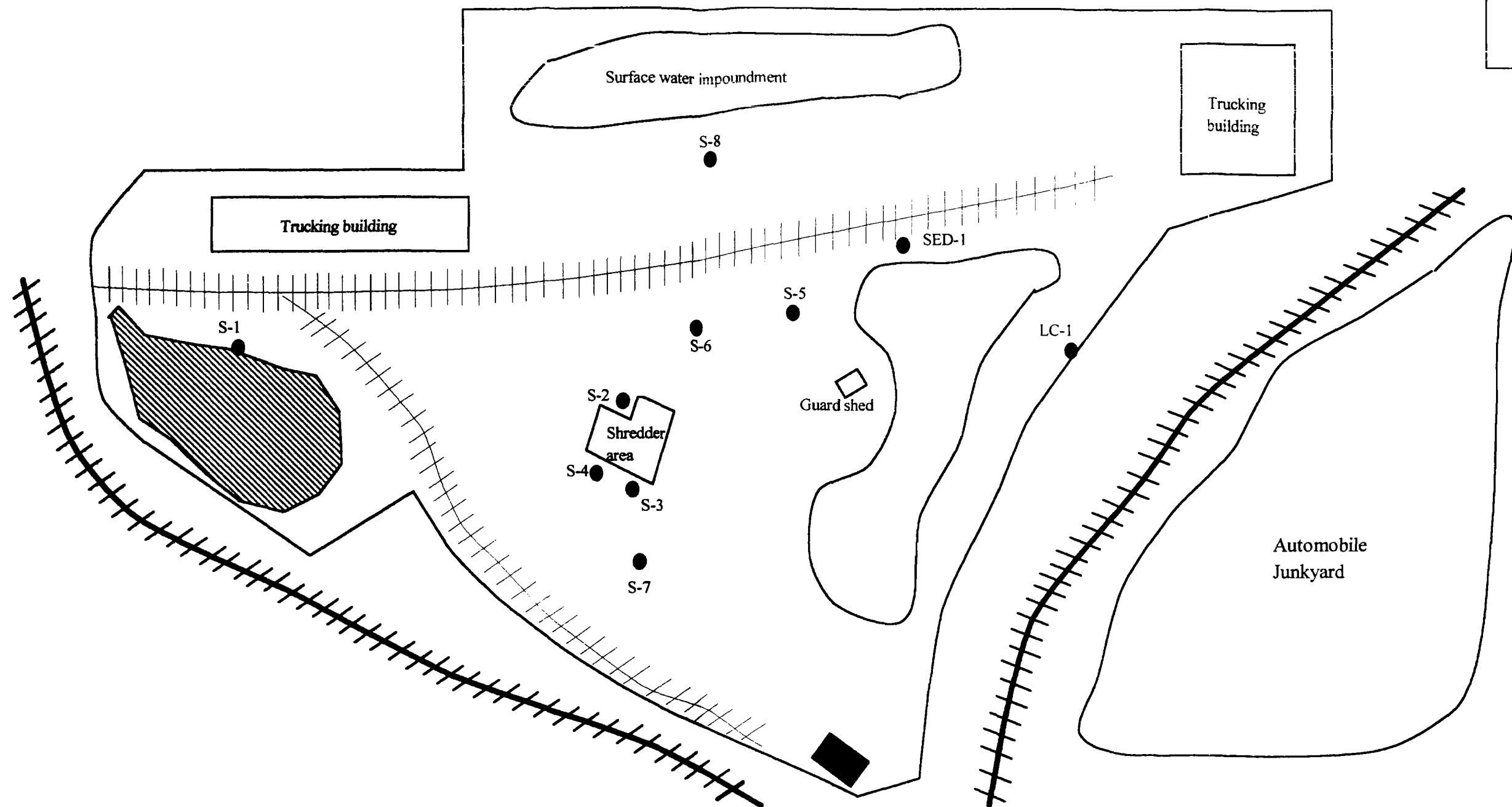


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| | | |
|--|-------------------|-----------------------|
| TITLE Sample Location Map - Main Autofluff Pile | | FIGURE 3-1 |
| SITE Midwest Metalics | | SCALE Not to scale |
| CITY Summit | STATE Illinois | TDD S05-0001-025 |
| SOURCE Ecology and Environment, Inc. | | DATE May 2000 |



Legend

- | | | | |
|---|--------------------------|--|------------------------------------|
|  | Inactive railroad tracks |  | Reprocessed autofluff storage area |
|  | Active railroad tracks |  | Main autofluff pile |
|  | Abandoned railcar |  | Sample location |



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| | | | |
|--------|--|--------|--------------|
| Title | Sample Location Map - Non-pile locations | Figure | 3-2 |
| Site | Midwest Metallica | Scale | Not to scale |
| City | Summit | State | Illinois |
| Source | Ecology and Environment, Inc. | TDD | S05-0001-025 |
| | | Date | May 2000 |

4. Analytical Results

On March 15, 2000, START and OSC Benning collected 29 samples of autofluff material from 27 locations, one liquid sample, and one sediment sample at the Midwest Metallic site. The samples were placed inside coolers with ice and prepared for sample shipment. On March 16, 2000, the samples were sent by courier service to Suburban Laboratories, Inc. (Suburban Labs) in Hillside, Illinois. Suburban Labs was requested to analyze the autofluff and sediment samples for the presence of polychlorinated biphenyls (PCBs), toxicity characteristic leaching procedure (TCLP) Resource Conservation and Recovery Act (RCRA) metals and total lead. The liquid sample was to be analyzed for total RCRA metals and PCBs. The analytical results from the samples were to be prepared in accordance with Office of Solid Waste and Emergency Response (OSWER) Level II quality assurance (QA) standards. Suburban Labs was also requested to report analytical results verbally within two weeks of sample receipt and to provide a written report containing validated analytical results three weeks after receiving the samples.

A preliminary analytical report was received by facsimile on April 4, 2000. On April 5, 2000, the reported data were reviewed, tabulated, compared to applicable standards, and analyzed. Validated analytical results were received from Suburban Labs on April 5, 2000. These data were compared to the preliminary data to ensure consistency and to confirm the earlier analysis. The conclusions drawn from the analyses are presented below. Tables C-1 through C-5 of Appendix C contain the tabulated analytical results from the collected samples, while the validation analytical reports are presented as Appendix D.

4.1 Autofluff Sample Results

The standards used in evaluating the threat posed by the sampled autofluff material from the Midwest Metallics site were the regulatory levels presented in 40 CFR, Section 261.24 (261.24), Table 1 and the threshold value of 50 parts per million (ppm) used to define PCB-contaminated wastes in 40

CFR 761.3. Concentrations reported for TCLP RCRA metals were compared to their applicable levels from 40 CFR 261.24, while the total PCB concentrations for each sample were compared to the 50-ppm threshold. The comparative analysis revealed exceedances of the regulatory limits for PCBs, TCLP lead, and TCLP cadmium. Total PCB concentrations ranged from 7.61 milligrams per kilogram (mg/kg) for sample B-5 to 217.7 mg/kg for sample B-1. Reported TCLP lead concentrations ranged from 0.14 milligrams per liter (mg/L) in S-5 to 94.1 mg/L in T-5, while TCLP cadmium values ranged from 0.178 mg/L in S-2 to 1.07 mg/L in S-1. Each collected sample was found to contain at least one of the seven Aroclors. However, none of the samples contained detectable levels of TCLP silver, TCLP selenium, or PCB-1221. The comparison revealed that 12 of the 27 sampled locations (B-1, B-2, B-10, T-3, T-4, T-6 through T-8, and S-1 through S-8) contained total PCBs at levels that exceed the 50-ppm threshold value. TCLP lead concentrations in samples B-3 through B-5, B-7, B-9, and T-2 through T-8 exceed the regulatory limit of 5 mg/L, while the concentration of TCLP cadmium reported for S-1 exceeds the regulatory level of 1 mg/L.

The concentrations reported for total lead in the collected samples were compared to the U.S. EPA guidance range for total lead of 1,000 to 1,500 ppm. This concentration range is based on results obtained from the Integrated Exposure Uptake Biokinetic model for the effects of lead on children. Reported total lead values for the collected samples ranged from 20.6 mg/kg in S-8 to 180,000 mg/kg in B-1. A comparative analysis of the total lead data revealed that only one of the 29 samples (S-8) had a total lead concentration below the minimum U.S. EPA guideline limit of 1,000 ppm. The next lowest reported value was a concentration of 2,170 mg/kg for S-3.

Tables C-1 through C-3 present the reported contaminant concentrations for the collected autofluff samples and the applicable regulatory and guideline levels by sample type (base of pile, top of pile, and non-pile).

4.2 Sediment Sample Results

The contaminant concentrations reported for sample SED-1 were compared against the same regulatory levels used for the autofluff samples, namely, the 50-ppm standard from 40 CFR 761.3 and the regulatory levels from 40 CFR 261.24. None of the standards used were exceeded; however, the total PCB concentration of 42.8 mg/kg exceeds the "walk away" cleanup standard of 25 mg/kg that would apply to the site based on definitions presented in 40 CFR 761.61.

Similar to those for the autofluff samples, the reported total lead values from SED-1 were evaluated against the U.S. EPA guideline range for total lead. The reported concentration of 7,370 mg/kg exceeded the minimum guideline value of 1,000 ppm. Appendix C, Table C-4 contains the reported contaminant concentrations and the applicable standards used to evaluate SED-1.

4.3 Liquid Sample Results

The reported contaminant concentrations for LC-1 were compared to two sets of standards, the Illinois Environmental Protection Agency (Illinois EPA) General Effluent Standards, as presented in Title 35 of the Illinois Administrative Code, Sections 304.124 and 304.126, and the National Primary Drinking Water Standards (NPDWS), as presented in 40 CFR 141.62.

A comparison of the reported concentrations to the applicable limits revealed that chromium, lead, and mercury were present in the LC-1 at levels that exceeded both Illinois EPA and U.S. EPA threshold values. No other compounds exceeded either of the two comparative standards used. The analytical report presented a chromium value of 0.148 mg/L (Illinois EPA - 0.1 mg/L, U.S. EPA - 0.1 mg/L), a lead value of 7.0 mg/L (Illinois EPA - 0.2 mg/L, U.S. EPA - 0.015 mg/L), and a mercury value of 0.0052 mg/L (Illinois EPA - 0.0005, U.S. EPA - 0.002), which all exceed the standards used. The reported analytical results from LC-1 and the standards used to evaluate these results are presented in Appendix C, Table C-5.

5. Threats to Human Health and the Environment

Paragraph (b)(2) of Part 300.415 of the NCP lists factors to be considered when determining the appropriateness of a potential removal action at a site. The following discussion summarizes those factors for the Midwest Metallica site for wastes defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

A review of the analytical data reported for the samples collected at the site on March 15, 2000, indicate that lead and PCBs are the main contaminants of concern (COCs) at the Midwest Metallica site. When the data are compared to applicable regulatory and guideline limits, there were several instances of the limit being exceeded, indicating that there are hazardous materials located at the Midwest Metallica site.

- **Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chains.** Although automotive recycling efforts have been discontinued at the Midwest Metallica site, other active operations are still being conducted at the site. Additionally, the site is not secure and is located within 1 mile of residential housing. Analytical results from the samples collected at the site confirm the presence of total PCBs, TCLP lead, total lead, and TCLP cadmium at elevated levels. The maximum reported concentrations for these compounds were 217.7 mg/kg, 94.1 mg/L, 180,000 mg/kg, and 1.07 mg/L, respectively, for the autofluff samples. These values all exceed the regulatory or guideline limits established by U.S. EPA for these compounds. Exposure to PCBs can result in chloracne (a long-lasting and disfiguring skin disease); impaired liver function; a variety of neurobehavioral symptoms; menstrual disorders; and an increased incidence of cancer. Lead exposure has been shown to produce infertility, retarded mental developmental in young children, tiredness, constipation, muscle pains, seizures, memory and concentration difficulties, and other symptoms. The reported concentrations for SED-1 do not exceed the standards used for evaluation; however, the reported total PCB concentration of 42.8 mg/kg exceeds the U.S. EPA "walk away" cleanup value of 25 mg/kg for non-secure facilities. Contaminant levels in LC-1 exceed Illinois EPA effluent standards

and U.S. EPA NPDWS for chromium, lead, and mercury. These elevated levels are especially significant because off-site migration of stormwater runoff was observed during the site reconnaissance. The potential health effects of chromium include skin ulcers, stomach ulcers, nose bleed, stomach irritation, convulsions, liver damage, and kidney damage. Headaches, chest pains, nausea, lung irritation, and fever are among the acute symptoms of mercury exposure.

- **High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.** All samples collected at the site were surface or near-surface samples (within 24 inches of ground surface). This indicates that the sample locations are susceptible to erosion impacts. Material from sample locations T-1 through T-8 and S-1 through S-8 has a greater likelihood of erosional impact because the samples were collected within 3 inches of the ground surface. The most likely erosion mechanisms at the Midwest Metallica site are wind and rain erosion, which are both also excellent mechanisms for off-site material transport.
- **Weather conditions that may cause pollutants or contaminants to migrate or be released.** All samples from the Midwest Metallica site were collected at depths of 0 to 24 inches below ground surface. As such, the material can be impacted by wind and rainfall. The off-site migration of contaminants by stormwater runoff has been documented at the site, and material located at the top of the pile, which is typically between 30 and 45 feet above ground surface, is likely to be transported off site by high winds. Analytical results from samples collected from the top of the main autoluff pile reveal PCBs present at concentrations almost seven times the U.S. EPA "walk away" cleanup standard (25 mg/kg) and total lead present at concentrations up to 30 times the minimum guideline concentration (1,000 ppm). These levels combined with the high potential for weather impact and the proximity of residential housing (less than 1 mile) represent a threat.
- **Threat of fire or explosion.** Autoluff, which is the primary source material at the Midwest Metallica site, can be described as the residual material from the shredding of automobile and vehicular components. Among the identifiable material types that were observed in the autoluff at the site were foam from seats and dashboards, plastic-wrapped electrical wires, fabric from seats and carpeting, and plastic covering from dashboards and seats. These materials are all flammable under certain conditions and, when burnt, have the potential to produce noxious and/or toxic emissions. The main autoluff pile has approximate average dimensions of 850 feet in length, 125 feet in width, and 40 feet in height, representing more than 157,400 cubic yards (yd³) of potentially ignitable materials. An estimated 11,600 yd³ of reprocessed autoluff is located in the apparent storage area at the west-central portion of the site.

6. Cost Projection

Cost projections were developed for two response options at the Midwest Metallics site. Based on the analytical results from the collected samples, START estimated the volume of contaminated materials at the site that would require treatment and/or disposal. The derived volumes were calculated based on a site footprint of 23 acres, a maximum depth of excavation of 3 feet, the estimated 157,400 cubic yards (yd³) of material in the main autofluff pile, and the estimated 11,600 yd³ of material in the storage area. Based on these volumes, approximately 280,320 yd³ of hazardous or potentially hazardous material are located at the Midwest Metallics site that require treatment and/or disposal.

The first option evaluated for the Midwest Metallics site involves the excavation of lead-contaminated materials, the on-site stabilization of the excavated materials, and the off-site disposal of the stabilized materials. An estimated 280,320 yd³ of contaminated materials are present at the site that would require excavation and stabilization. Lime kiln dust, or a similar material, would be mixed with the excavated soils in a pit to stabilize the material. Once stabilized, the material would be taken off site for disposal at a U.S. EPA-approved landfill.

The second option considered for the site requires the excavation of contaminated materials, the consolidation of these materials at a central location, the capping of the consolidated pile, and the erection of a fence around the capped pile. In this option, approximately 263,220 yd³ of material would be excavated and consolidated with the main autofluff pile to create a pile with the approximate basal dimension of 1,000 feet in length and 200 feet in width. Using an estimated width of 110 feet for the top of the pile and sideslopes constructed at a 1 horizontal:1 vertical slope, the consolidated pile would be approximately 50 feet high. The consolidated pile would be capped using a 1-foot-thick layer of soil. Compaction of the soil layer would be achieved by the equipment used for soil placement. A standard 8-foot-high chain-link fence would be erected around the consolidation pile at a buffer distance of 10 to 20 feet.

Cost projections were developed for the Midwest Metallica site using version 4.2 of the Removal Cost Management System (RCMS) software and the following assumptions:

- the estimated project duration of two months (60 days) includes 10 days of standby time;
- the minimum contractor personnel will consist of a response manager, field cost administrator, foreman, four clean-up technicians, and eight equipment operators; and
- the minimum U.S. EPA personnel will consist of one START and one OSC.

For the first option, it was assumed that 112,000 yd³ of backfill, purchased at a rate of \$10 per yd³, would be needed to bring the site back to grade. It was also assumed that lime kiln dust would be mixed with the contaminated material at a mix rate of 10% lime kiln dust to soil by weight to achieve stabilization. The cost used for lime kiln dust was \$45 per ton. Using these data and an assumed equipment list, RCMS projected that the project cost for this option was in excess of \$4.1 million. The RCMS cost projection for the option is presented in Appendix E. It should be noted that no disposal or transportation costs were included in the cost projection due to the variability of prices for those services.

The cost projection for the second option assumes that a lesser amount of backfill will be needed to complete the remedial activities as described. In this option, an estimated 100,000 yd³ of backfill will be needed to return the site to grade and to construct the 1-foot cap for the consolidated pile of material. The project cost estimated by RCMS for the second response option is over \$2.2 million. However, the cost of erecting the protective fence around the consolidation pile is not included in the RCMS cost projection. Using an estimated rate of \$1.50 per linear foot of installed fencing, a projected fenced distance of 2,600 feet, and a 20% contingency, the estimated fencing cost of approximately \$4,700 is incidental to the project cost. Appendix E also contains the RCMS cost projection for this option.

It should be noted that the cost estimates prepared for these response options are not intended to be comprehensive and are for estimation purposes only.

7. Summary

The Midwest Metallics site is a 23-acre property located at 7655 West 59th Street in Summit, Cook County, Illinois. An automobile scrap metal processing/recycling facility operated at the site from 1976 through 1998. Currently, two active trucking companies occupy different portions of the site. No obvious signs of trespassing were noted at the site; however, several gaps were observed in the perimeter fencing. The site is located in a commercial/industrial area; however, residential development is located within a mile of the site's eastern boundary.

On March 15, 2000, START and U.S. EPA collected 29 autofluff samples, one liquid sample, and one sediment sample at the site. These samples were sent to Suburban Labs to be analyzed for the presence of PCBs and RCRA metals (TCLP and total, as applicable). The sample analytical results revealed that total PCB and lead concentrations at the site frequently exceeded the applicable regulatory limits and guideline values. Based on the analyte concentrations and guidelines presented in NCP, it was determined that materials at the Midwest Metallics site represent a threat to human health and the environment.

START used the analytical results to estimate the volume of contaminated materials on site that would require treatment and/or disposal. The derived volumes were calculated based on a site footprint of 23 acres, a maximum depth of excavation of 3 feet, the main autofluff pile containing an estimated 157,400 yd³ of material, the material storage area containing approximately 11,600 yd³ of material, and the pile of consolidated materials having basal dimensions of 1,000 feet long and 200 feet wide. An equipment list and an estimated project duration were input into the RCMS software for each option in order to make cost projections. Based on input data, the software estimated that the project costs for the first option (material excavation, on-site stabilization, and off-site disposal) exceed \$4.1 million, while the estimated costs for the second option (material excavation, consolidation, capping, and fencing) exceed \$2.2 million.

Appendix A

Summary Table of Sample Collection Data

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Table A-1

SAMPLE COLLECTION INFORMATION
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000

| Sample Designation | Time (hours) | Depth (in. BGS) | Coordinates | | Elevation (feet) | Description |
|--------------------|--------------|-----------------|-------------|-------------|------------------|--|
| | | | North | West | | |
| B-1 | 1040 | 0-12 | 41°46'54.0" | 87°49'05.9" | 4 | Dark brown, dirt-like material with shredded auto parts. |
| B-2 | 1050 | 0-12 | 41°46'52.6" | 87°49'04.9" | 4 | Brown, dirt-like material. |
| SED-1 | 1053 | 0-18 | 41°46'52.8" | 87°49'04.9" | 0 | Dark brown/black muck. |
| B-3 | 1100 | 0-24 | 41°46'54.2" | 87°49'03.4" | 7 | Brown, dirt-like material. |
| B-4 | 1112 | 0-8 | 41°46'52.1" | 87°49'03.4" | 9 | Light brown/brown, silty, soil-like material. |
| B-5 | 1120 | 0-8 | 41°46'38.0" | 87°48'52.7" | 10 | Brown, dirt-like material. |
| B-6 | 1130 | 0-24 | 41°46'48.5" | 87°49'02.5" | 10 | Brown, dirt-like material. |
| B-6 (DUP) | 1130 | 0-24 | 41°46'48.5" | 87°49'02.5" | 10 | Brown, dirt-like material. |
| B-7 | 1200 | 0-24 | 41°46'45.2" | 87°49'00.3" | 9 | Brown, dirt-like material. |
| LC-1 | 1123 | 0-1 | 41°46'54.4" | 87°49'00.6" | 0 | Brown, translucent liquid. |
| B-8 | 1210 | 0-6 | 41°46'47.1" | 87°49'06.6" | 4 | Dark brown, silty, soil-like material. |
| B-9 | 1215 | 0-6 | 41°46'47.3" | 87°49'05.0" | 5 | Brown, sand-silt, soil-like material with shredded auto parts. |
| B-10 | 1225 | 0-6 | 41°46'46.6" | 87°49'08.7" | 10 | Brown, dirt-like material with shredded automobile parts. |
| B-11 | 1230 | 0-8 | 41°46'54.2" | 87°49'05.3" | 8 | Red-brown, silty, soil-like material. |
| T-1 | 1534 | 0-3 | 41°46'43.0" | 87°49'05.2" | 20-25 | Dark brown, dirt-like material with shredded automobile parts. |
| T-2 | 1529 | 0-3 | 41°46'43.1" | 87°49'04.8" | 20-25 | Brown, silty, soil-like material with shredded automobile parts. |
| T-3 | 1504 | 0-3 | 41°46'42.5" | 87°49'03.2" | 40-48 | Dark brown, dirt-like material with shredded automobile parts. |
| T-4 | 1515 | 0-3 | 41°46'43.5" | 87°49'02.3" | 40-48 | Dark brown, silty, soil-like material with shredded automobile parts. |
| T-5 | 1443 | 0-3 | 41°46'40.4" | 87°49'03.1" | 40-48 | Brown, dirt-like material with shredded automobile parts. |
| T-6 | 1430 | 0-3 | 41°46'39.0" | 87°49'03.0" | 40-48 | Brown, dirt-like material with shredded automobile parts. |
| T-6 (DUP) | 1430 | 0-3 | 41°46'39.0" | 87°49'03.0" | 40-48 | Brown, dirt-like material with shredded automobile parts. |
| T-7 | 1458 | 0-3 | 41°46'40.5" | 87°49'04.8" | 40-48 | Brown, silty, soil-like material with shredded foam parts. |
| T-8 | 1502 | 0-3 | 41°46'39.2" | 87°49'05.3" | 40-48 | Brown, silty, soil-like material with shredded plastic and metal pieces. |
| S-1 | 1230 | 0-3 | 41°46'49.4" | 87°49'12.4" | 0 | Dark brown, topsoil-like material. |
| S-2 | 1240 | 0-3 | 41°46'50.9" | 87°49'14.5" | 0 | Brown, clayey, soil-like material. |
| S-3 | 1315 | 0-3 | 41°46'51.7" | 87°49'10.9" | 0 | Brown, soil-like material. |
| S-4 | 1330 | 0-3 | 41°46'50.7" | 87°49'10.1" | 0 | Brown, soil-like material with metal pieces. |
| S-5 | 1345 | 0-3 | 41°46'53.8" | 87°49'10.7" | 0 | Brown, topsoil-like material. |
| S-6 | 1355 | 0-3 | 41°46'52.7" | 87°49'10.5" | 0 | Brown, dirt-like material with shredded automobile parts. |
| S-7 | 1405 | 0-3 | 41°46'52.9" | 87°49'08.5" | 0 | Dark brown, silty, soil-like material. |
| S-8 | 1520 | 0-3 | 41°46'57.5" | 87°49'08.7" | 0 | Brown, dirt-like material with shredded automobile parts. |

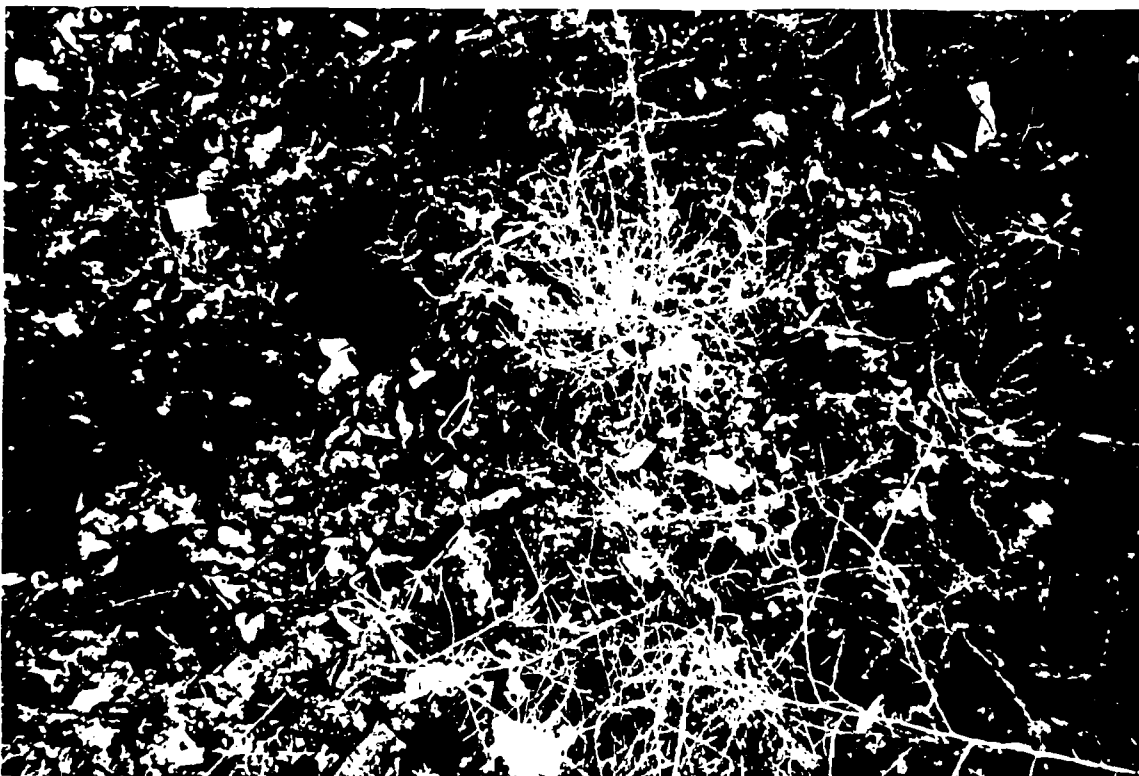
Key:

in. = Inches.
 BGS = Below ground surface
 DUP = Duplicate

Note: Elevation is measured in feet above ground surface.

Appendix B

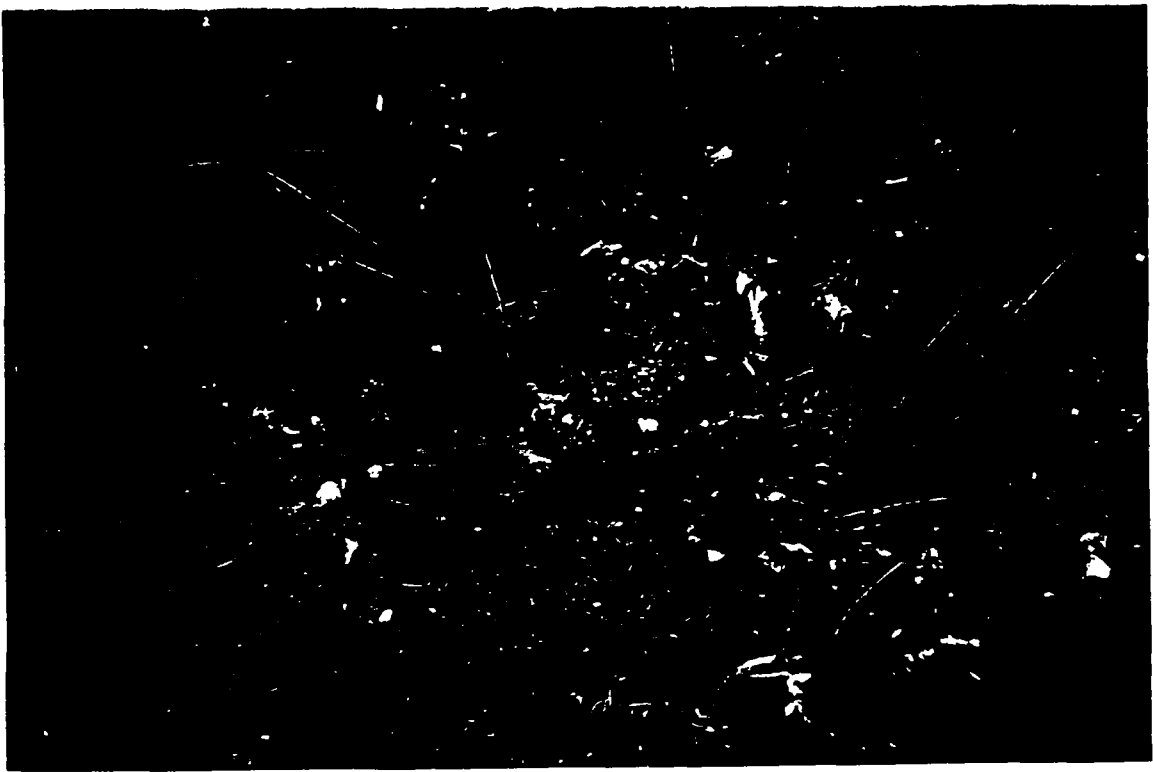
Photodocumentation



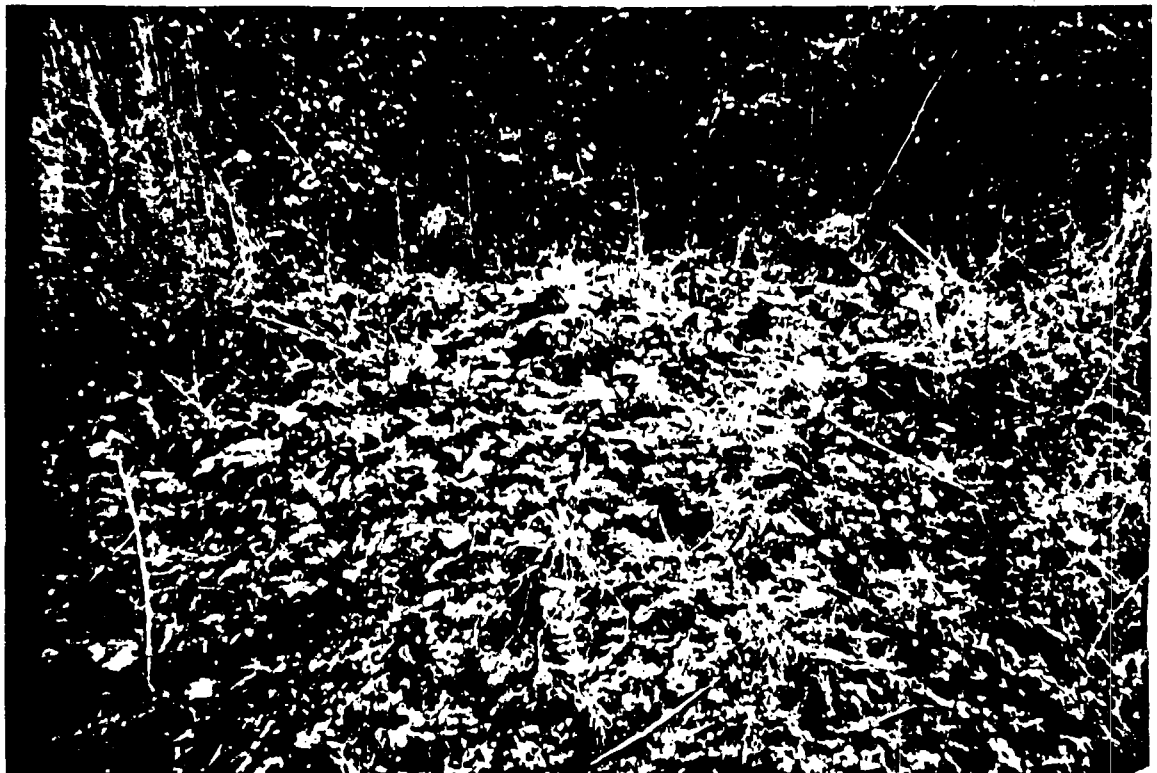
| | | | | | |
|------------------|--------------------------|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallica | Date: | March 15, 2000 | Time: | 1040 |
| Location: | Summit, IL | Direction: | Down | Photographer: | G. Daley |
| Subject: | Sample location for B-1. | | | | |



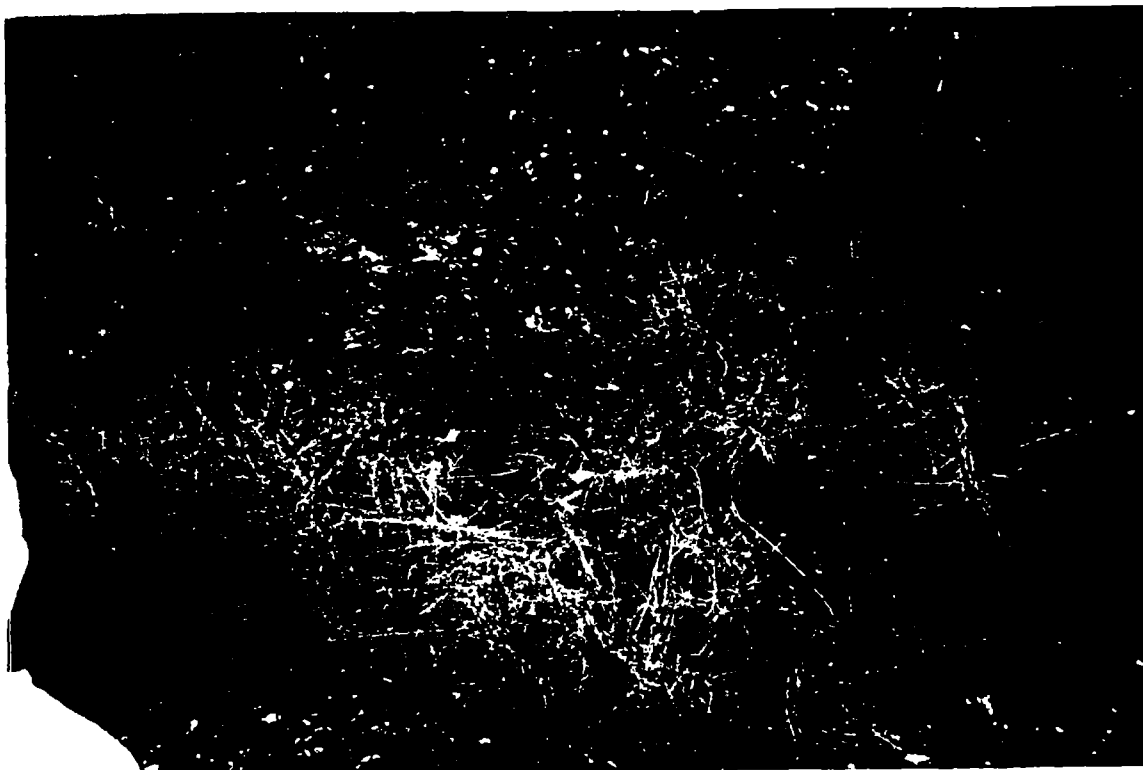
| | | | | | |
|------------------|--|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallica | Date: | March 15, 2000 | Time: | 1216 |
| Location: | Summit, IL | Direction: | Northeast | Photographer: | G. Daley |
| Subject: | Sample location for B-9 at indentation in main autofluff pile. | | | | |



| | | | | | |
|------------------|--------------------------|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallica | Date: | March 15, 2000 | Time: | 1210 |
| Location: | Summit, IL | Direction: | Down | Photographer: | G. Daley |
| Subject: | Sample location for B-8. | | | | |



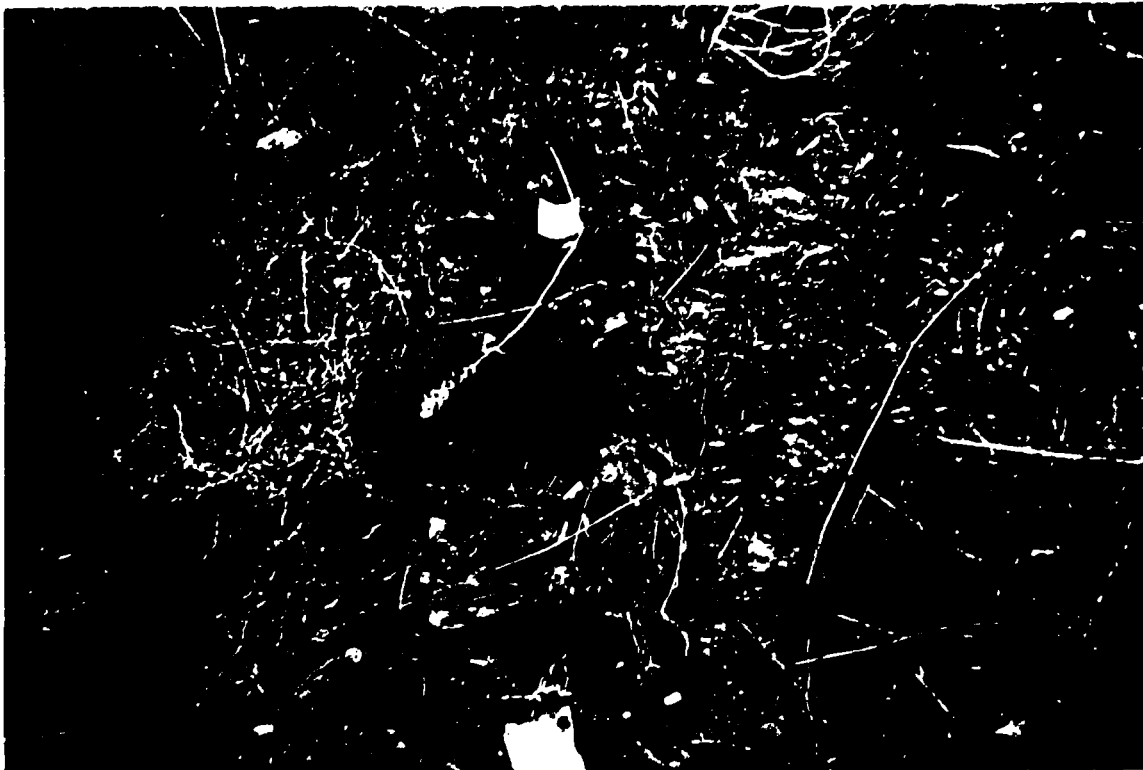
| | | | | | |
|------------------|--------------------------------|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallica | Date: | March 15, 2000 | Time: | 1053 |
| Location: | Summit, IL | Direction: | North | Photographer: | G. Daley |
| Subject: | START collecting sample SED-1. | | | | |



| | | | | | |
|------------------|---------------------------|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallica | Date: | March 15, 2000 | Time: | 1231 |
| Location: | Summit, IL | Direction: | Up | Photographer: | G. Daley |
| Subject: | Sample location for B-11. | | | | |



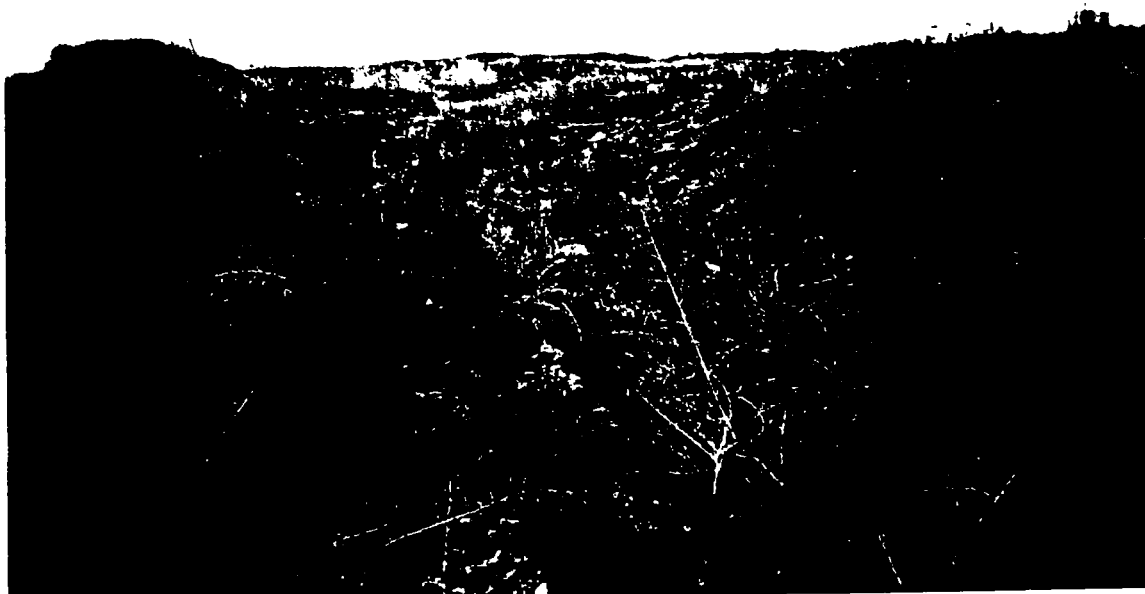
| | | | | | |
|------------------|--------------------------|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallica | Date: | March 15, 2000 | Time: | 1632 |
| Location: | Summit, IL | Direction: | Down | Photographer: | G. Daley |
| Subject: | Sample location for T-6. | | | | |



Site: Midwest Metallica
Location: Summit, IL
Subject: Sample location for T-7.

Date: March 15, 2000
Direction: Down

Time: 1634
Photographer: G. Daley



Site: Midwest Metallica
Location: Summit, IL
Subject: Southern end of top of main auto/luff pile.

Date: March 15, 2000
Direction: South

Time: 1637
Photographer: G. Daley



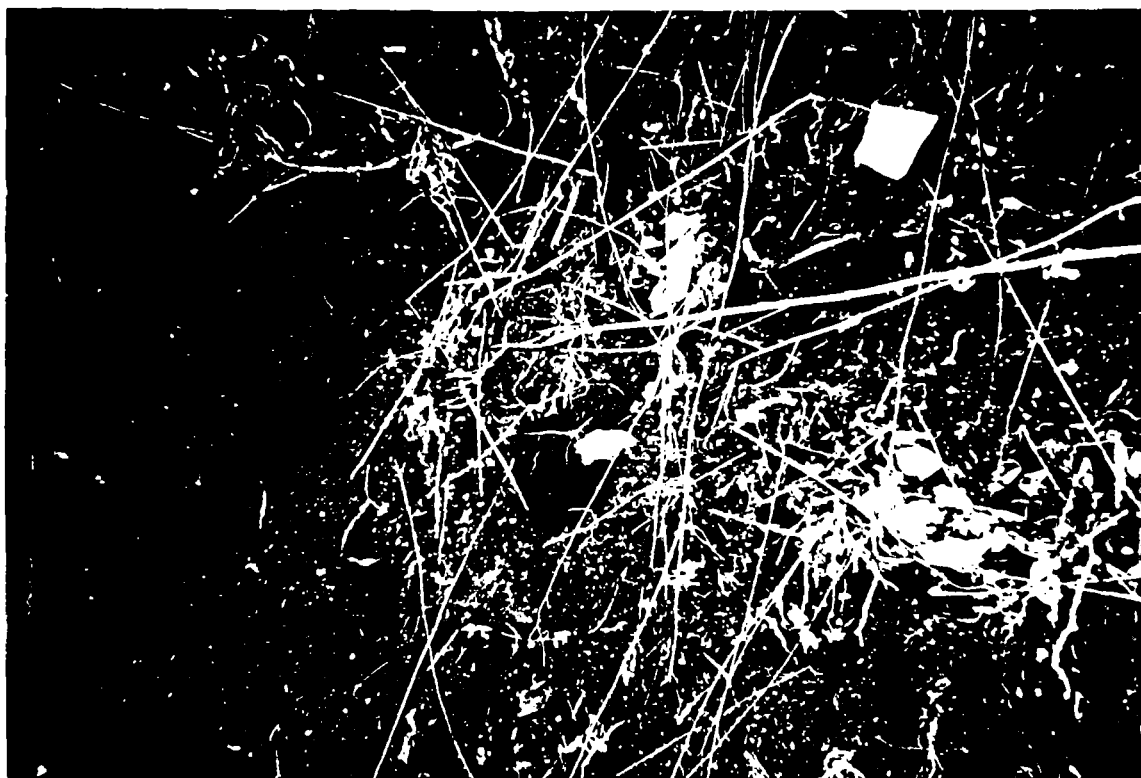
| | | | | | |
|------------------|---|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallics | Date: | March 15, 2000 | Time: | 1637 |
| Location: | Summit, IL | Direction: | North | Photographer: | G. Daley |
| Subject: | Northern end of top of main autofluff pile. | | | | |



| | | | | | |
|------------------|---|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallics | Date: | March 15, 2000 | Time: | 1650 |
| Location: | Summit, IL | Direction: | West-southwest | Photographer: | G. Daley |
| Subject: | "Cut" in main autofluff pile where samples T-1 (left wall) and T-2 (right wall) were collected. | | | | |



| | | | | | |
|-----------|----------------------------|------------|----------------|---------------|----------|
| Site: | Midwest Metallica | Date: | March 16, 2000 | Time: | 0931 |
| Location: | Summit, IL | Direction: | Down | Photographer: | G. Daley |
| Subject: | Sample location for SED-1. | | | | |



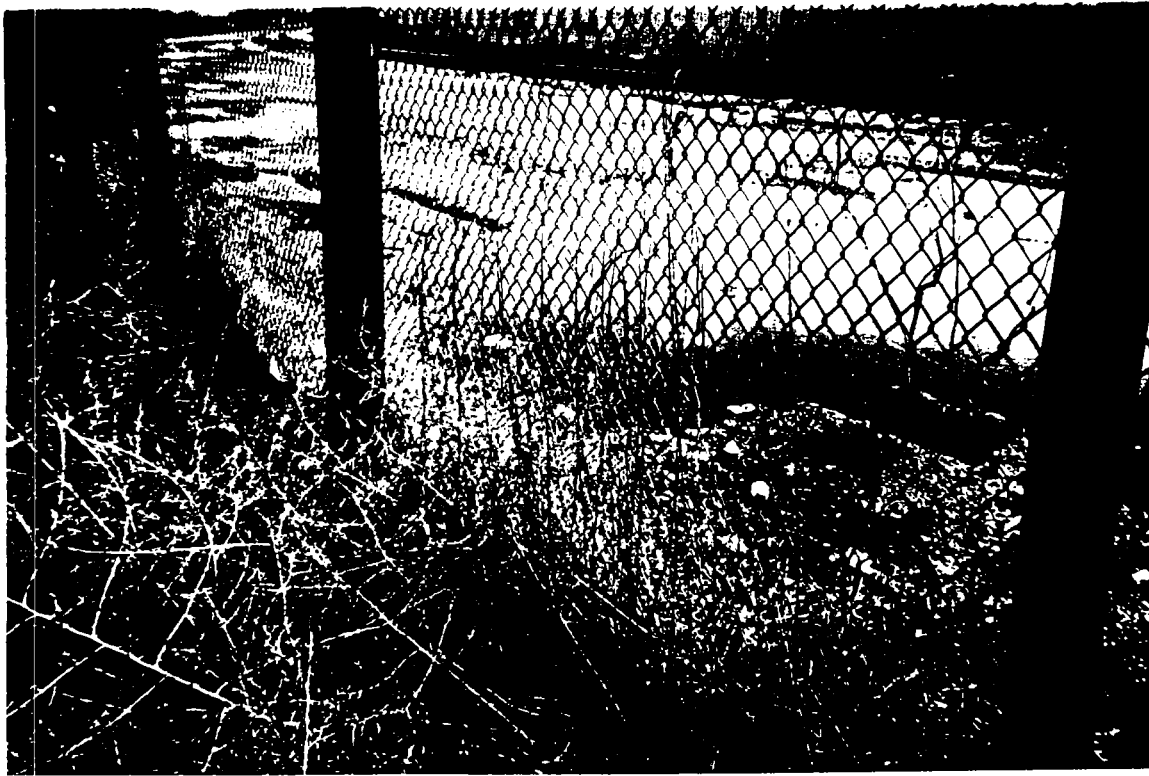
| | | | | | |
|-----------|--------------------------|------------|----------------|---------------|----------|
| Site: | Midwest Metallica | Date: | March 16, 2000 | Time: | 0937 |
| Location: | Summit, IL | Direction: | Down | Photographer: | G. Daley |
| Subject: | Sample location for B-3. | | | | |



| | | | | | |
|------------------|---|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metalics | Date: | March 16, 2000 | Time: | 0940 |
| Location: | Summit, IL | Direction: | Southwest | Photographer: | G. Daley |
| Subject: | Chunks of asphalt along eastern site boundary near northeast corner of main autotluff pile. | | | | |



| | | | | | |
|------------------|---------------------------|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metalics | Date: | March 16, 2000 | Time: | 0946 |
| Location: | Summit, IL | Direction: | Down | Photographer: | G. Daley |
| Subject: | Sample location for LC-1. | | | | |



| | | | | | |
|------------------|--|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallica | Date: | March 16, 2000 | Time: | 0947 |
| Location: | Summit, IL | Direction: | East-northeast | Photographer: | G. Daley |
| Subject: | Stormwater/leachate pool migrating off site. | | | | |



| | | | | | |
|------------------|--|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallica | Date: | March 16, 2000 | Time: | 1002 |
| Location: | Summit, IL | Direction: | Southwest | Photographer: | G. Daley |
| Subject: | Abandoned railroad car at southwestern corner of site. | | | | |



| | | | | | |
|------------------|--|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallics | Date: | March 16, 2000 | Time: | 1003 |
| Location: | Summit, IL | Direction: | Southwest | Photographer: | G. Daley |
| Subject: | Concrete-filled metal forms near southeastern corner of main autofluff pile. | | | | |



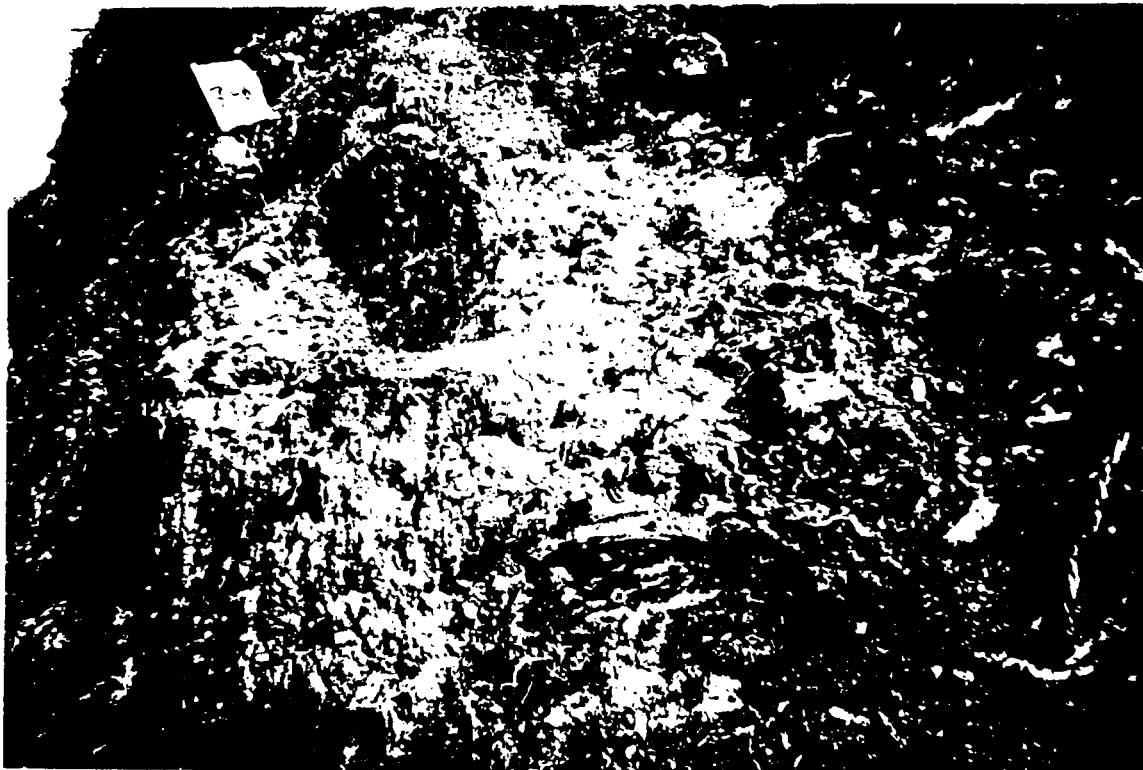
| | | | | | |
|------------------|---|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metallics | Date: | March 16, 2000 | Time: | 1005 |
| Location: | Summit, IL | Direction: | Northeast | Photographer: | G. Daley |
| Subject: | Southeastern corner of main autofluff pile. | | | | |



Site: Midwest Metalics **Date:** March 16, 2000 **Time:** 1006
Location: Summit, IL **Direction:** Southeast **Photographer:** G. Daley
Subject: Broken fencing at southeastern corner of site.



Site: Midwest Metalics **Date:** March 16, 2000 **Time:** 1024
Location: Summit, IL **Direction:** West **Photographer:** G. Daley
Subject: Eastern wall of shredder area.



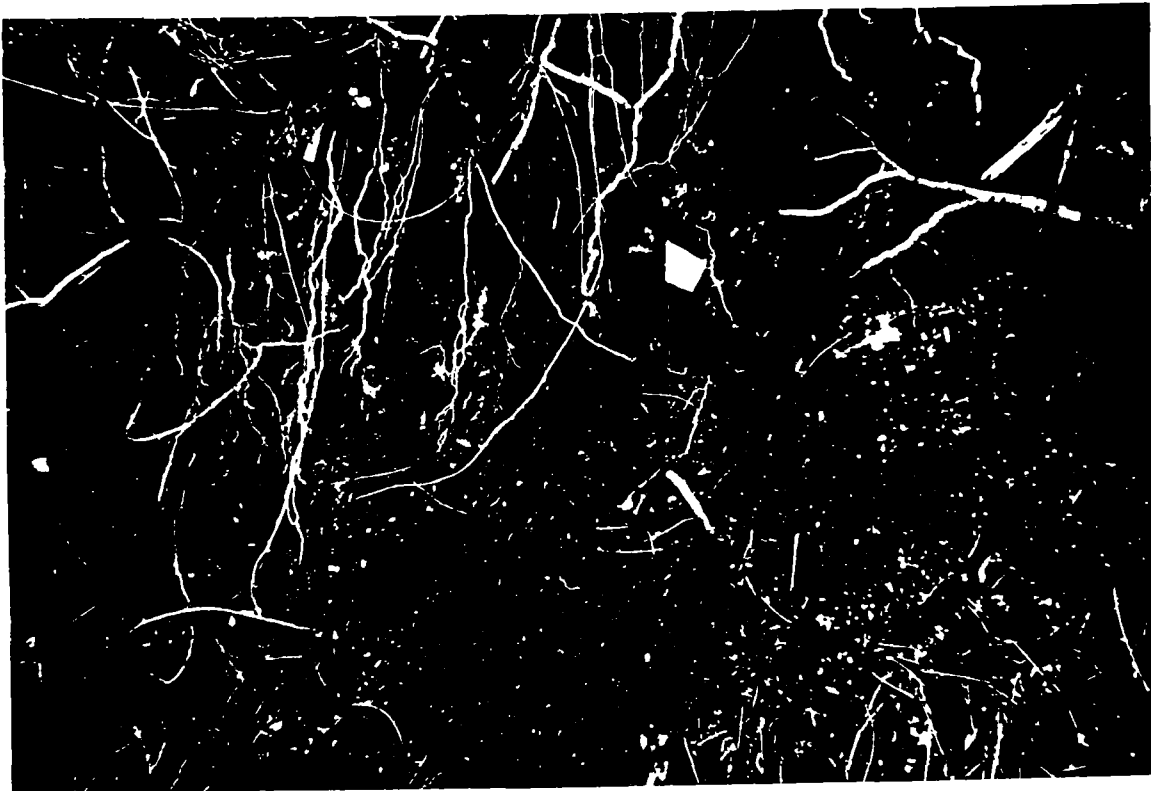
| | | | | | |
|-----------|--------------------------------------|------------|----------------|---------------|----------|
| Site: | Midwest Metallica | Date: | March 16, 2000 | Time: | 1032 |
| Location: | Summit, IL | Direction: | Up | Photographer: | G. Daley |
| Subject: | Closeup of sample location for B-11. | | | | |



| | | | | | |
|-----------|-------------------------|------------|----------------|---------------|----------|
| Site: | Midwest Metallica | Date: | March 16, 2000 | Time: | 1042 |
| Location: | Summit, IL | Direction: | Down | Photographer: | G. Daley |
| Subject: | Sample location for S-7 | | | | |



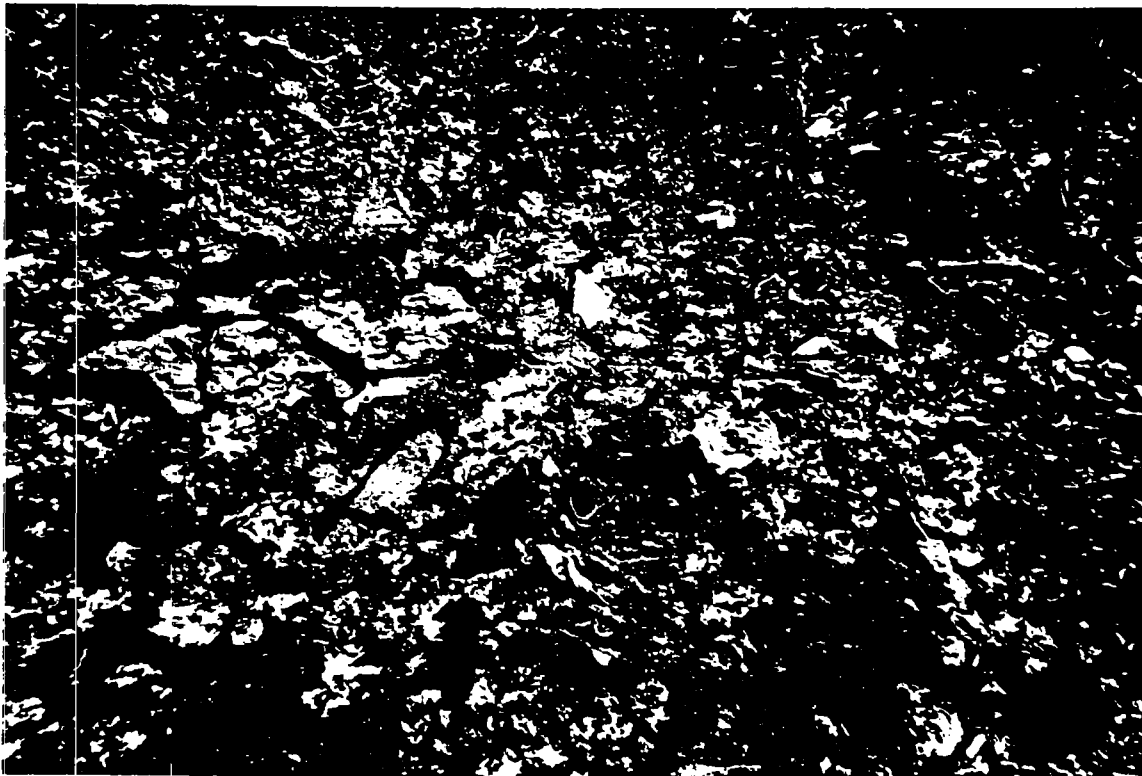
| | | | | | |
|------------------|--|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metalics | Date: | March 16, 2000 | Time: | 1045 |
| Location: | Summit, IL | Direction: | North | Photographer: | G. Daley |
| Subject: | Shredder compartment and control room. | | | | |



| | | | | | |
|------------------|--------------------------|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metalics | Date: | March 16, 2000 | Time: | 1054 |
| Location: | Summit, IL | Direction: | Down | Photographer: | G. Daley |
| Subject: | Sample location for S-i. | | | | |



Site: Midwest Metallica **Date:** March 16, 2000 **Time:** 1058
Location: Summit, IL **Direction:** Southwest **Photographer:** G. Daley
Subject: Top of suspected storage area for reprocessed autofluff along western site boundary.



Site: Midwest Metallica **Date:** March 16, 2000 **Time:** 1100
Location: Summit, IL **Direction:** Down **Photographer:** G Daley
Subject: Sample location for S-2.



| | | | | | |
|------------------|---|-------------------|----------------|----------------------|----------|
| Site: | Midwest Metalics | Date: | March 16, 2000 | Time: | 1133 |
| Location: | Summit, IL | Direction: | East-northeast | Photographer: | G. Daley |
| Subject: | Guard shack and ramp to top of main autofluff pile. | | | | |



| | | | | | |
|------------------|---|-------------------|-----------------|----------------------|----------|
| Site: | Midwest Metalics | Date: | March 16, 2000 | Time: | 1138 |
| Location: | Summit, IL | Direction: | South-southeast | Photographer: | G. Daley |
| Subject: | Piles of reprocessed autofluff and ramp to shredder area. | | | | |

Appendix C

Summary Tables of Analytical Results

Table C-1

ANALYTICAL RESULTS FOR SAMPLES COLLECTED AT BASE OF MAIN AUTOFLUFF PILE
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000

Units = PCBs (µg/kg), TCLP RCRA Metals (mg/L), Total lead (mg/kg), and Percent Moisture (%)

| Analytes | Regulatory Limit | Sample Designation | | | | | | | | | | | |
|------------------|------------------|--------------------|---------|--------|--------|-------|--------|-----------|--------|--------|--------|--------|--------|
| | | B-1 | B-2 | B-3 | B-4 | B-5 | B-6 | B-6 (DUP) | B-7 | B-8 | B-9 | B-10 | B-11 |
| PCBs | | | | | | | | | | | | | |
| PCB-1016 | | 15,300 | 7,400 | 1,900 | 1,300 | ND | ND | ND | 2,700 | 3,000 | 2,800 | 3,400 | ND |
| PCB-1221 | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| PCB-1232 | | 15,300 | 7,400 | 1,900 | 1,300 | ND | ND | ND | 2,700 | 3,000 | 2,800 | 3,400 | ND |
| PCB-1242 | | 50,900 | 39,700 | 9,170 | 6,030 | ND | 11,500 | 7,180 | 12,600 | 11,700 | 12,100 | 17,000 | ND |
| PCB-1248 | | 40,800 | 36,200 | 5,550 | 6,450 | ND | ND | 5,890 | 8,060 | 7,960 | 9,140 | 8,860 | ND |
| PCB-1254 | | 76,600 | 57,300 | 17,600 | 3,100 | 7,610 | 12,200 | 10,700 | 16,300 | 11,500 | 14,100 | 16,200 | ND |
| PCB-1260 | | 18,800 | 14,200 | 5,930 | 5,440 | ND | 5,030 | 4,330 | 5,870 | 4,160 | 5,360 | 15,000 | ND |
| Total PCBs | 50,000 | 217,700 | 162,200 | 42,050 | 23,620 | 7,610 | 28,730 | 28,100 | 48,230 | 41,320 | 46,300 | 63,860 | 0.0 |
| TCLP RCRA Metals | | | | | | | | | | | | | |
| Arsenic | 5 | ND | ND | ND | 0.24 | 0.16 | ND | ND | 0.13 | ND | 0.082 | ND | ND |
| Barium | 100 | 2.47 | 2.08 | 3.46 | 3.47 | 2.4 | 1.59 | 1.39 | 2 | 1.08 | 0.423 | 3.33 | 0.22 |
| Cadmium | 1 | 0.483 | 0.919 | 0.644 | 0.619 | 0.726 | 0.678 | 0.803 | 0.963 | 0.602 | 0.544 | 0.555 | 0.825 |
| Chromium | 5 | 0.015 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Lead | 5 | 3.4 | 2.86 | 25.9 | 11.4 | 29.4 | 4.82 | 4.91 | 14.3 | 6.4 | 16.3 | 2.03 | 2.5 |
| Mercury | 0.2 | 0.013 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.0033 |
| Selenium | 1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Silver | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Other | | | | | | | | | | | | | |
| Total Lead | 1,000-1,500 | 180,000 | 13,800 | 13,200 | 10,500 | 9,370 | 9,310 | 41,200 | 9,610 | 9,230 | 9,300 | 8,660 | 10,400 |
| Percent Moisture | NA | 32.2 | 30.5 | 15.5 | 16.9 | 16.4 | 24.2 | 24.5 | 22.5 | 16.1 | 14.1 | 23.9 | 19.4 |

Key:

| | | |
|-------|---|---|
| DUP | = | Duplicate sample. |
| PCBs | = | Polychlorinated biphenyls. |
| ND | = | Not detected. |
| TCLP | = | Toxicity characteristic leaching procedure. |
| RCRA | = | Resource Conservation and Recovery Act. |
| NA | = | Not applicable. |
| µg/kg | = | Micrograms per kilogram. |
| mg/L | = | Milligrams per liter. |
| mg/kg | = | Milligrams per kilogram. |

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. Concentrations of PCBs are reported in parts per million or mg/kg in the report text. To convert µg/kg to mg/kg, divide the reported value by 1,000.

Source: Suburban Laboratories, Inc., Hillside, Illinois.

Table C-2

**ANALYTICAL RESULTS FOR SAMPLES FROM THE TOP OF THE MAIN AUTOFLUFF PILE
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000**

Units = PCBs (µg/kg), TCLP RCRA Metals (mg/L), Total lead (mg/kg), and Percent Moisture (%)

| Analytes | Regulatory Limit | Sample Designation | | | | | | | | |
|------------------|------------------|--------------------|--------|---------|---------|--------|--------|-----------|--------|--------|
| | | T-1 | T-2 | T-3 | T-4 | T-5 | T-6 | T-6 (DUP) | T-7 | T-8 |
| PCBs | | | | | | | | | | |
| PCB-1016 | | ND | ND | 22,700 | 16,100 | 8,320 | 16,800 | 24,900 | 19,200 | 11,600 |
| PCB-1221 | | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| PCB-1232 | | ND | ND | 22,700 | 16,100 | 8,320 | 16,800 | 24,900 | 19,200 | 11,600 |
| PCB-1242 | | ND | 16,900 | 59,500 | 43,600 | ND | ND | ND | ND | ND |
| PCB-1248 | | 12,800 | ND | 31,000 | 22,800 | 8,920 | 20,100 | 31,800 | 31,500 | 27,800 |
| PCB-1254 | | ND | 17,500 | 27,500 | 16,300 | ND | ND | ND | ND | ND |
| PCB-1260 | | 3,610 | ND | 9,260 | 4,090 | ND | 4,100 | 3,640 | 5,940 | 6,520 |
| Total PCBs | 50,000 | 16,410 | 34,400 | 172,660 | 118,990 | 25,560 | 57,800 | 85,240 | 75,840 | 57,520 |
| TCLP RCRA Metals | | | | | | | | | | |
| Arsenic | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Barium | 100 | 1.5 | 1.59 | 3.14 | 2.36 | 2.47 | 2.23 | 2.44 | 2.6 | 2.82 |
| Cadmium | 1 | 0.574 | 0.813 | 0.31 | 0.839 | 0.418 | 0.789 | 0.733 | 0.94 | 0.844 |
| Chromium | 5 | ND | ND | ND | ND | 0.087 | ND | ND | ND | ND |
| Lead | 5 | 3.72 | 8.2 | 6.01 | 23.3 | 94.1 | 59.8 | 27.3 | 10.4 | 27.8 |
| Mercury | 0.2 | ND | 0.0005 | ND | ND | ND | ND | 0.0007 | ND | ND |
| Selenium | 1 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Silver | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Other | | | | | | | | | | |
| Total Lead | 1,000-1,500 | 15,900 | 14,100 | 2,990 | 10,800 | 4,140 | 11,000 | 10,200 | 9,610 | 30,600 |
| Percent Moisture | NA | 13.3 | 6.7 | 21.1 | 14.7 | 9 | 15.9 | 17 | 19.8 | 13.4 |

Key:

| | | |
|-------|---|---|
| DUP | = | Duplicate sample. |
| PCBs | = | Polychlorinated biphenyls |
| ND | = | Not detected. |
| TCLP | = | Toxicity characteristic leaching procedure. |
| RCRA | = | Resource Conservation and Recovery Act. |
| NA | = | Not applicable |
| µg/kg | = | Micrograms per kilogram. |
| mg/L | = | Milligrams per liter. |
| mg/kg | = | Milligrams per kilogram. |

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. Concentrations of PCBs are reported in parts per million or mg/kg in the report text.
To convert µg/kg to mg/kg, divide the reported value by 1,000.

Source: Suburban Laboratories, Inc., Hillside, Illinois.

Table C-3

**ANALYTICAL RESULTS FOR SAMPLES FROM NON-PILE AREAS
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000**

Units = PCBs (µg/kg), TCLP RCRA Metals (mg/L), Total lead (mg/kg), and Percent Moisture (%)

| Analytes | Regulatory Limit | Sample Designation | | | | | | | |
|------------------|------------------|--------------------|--------|--------|--------|--------|---------|--------|--------|
| | | S-1 | S-2 | S-3 | S-4 | S-5 | S-6 | S-7 | S-8 |
| PCBs | | | | | | | | | |
| PCB-1016 | | NA | NA | 9,870 | 10,600 | 9,020 | 20,300 | 8,600 | 13,100 |
| PCB-1221 | | NA | NA | NA | NA | NA | NA | NA | NA |
| PCB-1232 | | NA | NA | 9,870 | 10,600 | 9,020 | 20,300 | 8,600 | 13,100 |
| PCB-1242 | | 48,900 | 41,600 | 26,100 | 27,500 | 26,100 | 49,600 | 19,400 | 30,000 |
| PCB-1248 | | 32,200 | 18,100 | 1,300 | 14,200 | 13,600 | 25,600 | 7,420 | 11,600 |
| PCB-1254 | | 50,000 | 14,600 | 14,500 | 10,100 | 10,900 | 23,200 | 5,490 | 6,040 |
| PCB-1260 | | 37,200 | 3,600 | 3,730 | NA | 4,340 | 13,000 | 1,400 | 1,500 |
| Total PCBs | 50,000 | 168,300 | 77,900 | 65,370 | 73,000 | 72,980 | 152,000 | 50,910 | 75,340 |
| TCLP RCRA Metals | | | | | | | | | |
| Arsenic | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Barium | 100 | 0.71 | 1.26 | 2.52 | 1.77 | 2.4 | 2.84 | 1.97 | 1.03 |
| Cadmium | 1 | 1.07 | 0.178 | 0.366 | 0.274 | 0.336 | 0.403 | 0.256 | 0.248 |
| Chromium | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Lead | 5 | 1.18 | NA | 0.283 | 0.879 | 0.14 | 1.39 | 1.55 | NA |
| Mercury | 0.2 | NA | NA | NA | 0.0005 | NA | NA | NA | NA |
| Selenium | 1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Silver | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Other | | | | | | | | | |
| Total Lead | 1,000-1,500 | 8,270 | 2,780 | 2,170 | 2,570 | 3,950 | 2,700 | 2,480 | 20.6 |
| Percent Moisture | NA | 34.5 | 42 | 13.1 | 6.6 | 24.8 | 23 | 4.5 | 19.4 |

Key:

| | | |
|-------|---|---|
| PCBs | = | Polychlorinated biphenyls. |
| TCLP | = | Toxicity characteristic leaching procedure. |
| RCRA | = | Resource Conservation and Recovery Act. |
| NA | = | Not applicable. |
| µg/kg | = | Micrograms per kilogram. |
| mg/L | = | Milligrams per liter. |
| mg/kg | = | Milligrams per kilogram. |

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. Concentrations of PCBs are reported in parts per million or mg/kg in the report text.
To convert µg/kg to mg/kg, divide the reported value by 1,000.

Source: Suburban Laboratories, Inc., Hillside, Illinois.

| Table C-4 | | |
|---|------------------|--------------------|
| ANALYTICAL RESULTS FROM SEDIMENT SAMPLE MIDWEST METALLICS SITE SUMMIT, ILLINOIS MARCH 15, 2000 | | |
| Units = PCBs (µg/kg), TCLP RCRA Metals (mg/L), Total lead (mg/kg), and Percent Moisture (%) | | |
| Analytes | Regulatory Limit | Sample Designation |
| | | SED-1 |
| PCBs | | |
| PCB-1016 | | 10,500 |
| PCB-1221 | | ND |
| PCB-1232 | | 10,500 |
| PCB-1242 | | ND |
| PCB-1248 | | 16,500 |
| PCB-1254 | | ND |
| PCB-1260 | | 5,300 |
| Total PCBs | 50,000 | 42,800 |
| TCLP RCRA Metals | | |
| Arsenic | 5 | ND |
| Barium | 100 | 4.52 |
| Cadmium | 1 | 0.419 |
| Chromium | 5 | ND |
| Lead | 5 | 3.97 |
| Mercury | 0.2 | ND |
| Selenium | 1 | ND |
| Silver | 5 | ND |
| Other | | |
| Total Lead | 1,000-1,500 | 7,370 |
| Percent Moisture | NA | 36.8 |

Key:

PCBs = Polychlorinated biphenyls.
 ND = Not detected.
 TCLP = Toxicity characteristic leaching procedure.
 RCRA = Resource Conservation and Recovery Act.
 NA = Not applicable.
 µg/kg = Micrograms per kilogram.
 mg/L = Milligrams per liter.
 mg/kg = Milligrams per kilogram.

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. Concentrations of PCBs are reported in parts per million or mg/kg in the report text. To convert µg/kg to mg/kg, divide the reported value by 1,000.

Source: Suburban Laboratories, Inc., Hillside, Illinois.

| Table C-5 | | | |
|--|------------------|--------------|--------------------|
| ANALYTICAL RESULTS FOR LIQUID SAMPLE MIDWEST METALLICS SITE SUMMIT, ILLINOIS MARCH 15, 2000 | | | |
| Units = mg/L, except Percent Moisture (%) | | | |
| Analytes | Regulatory Limit | | Sample Designation |
| | SDWA | Illinois EPA | LC-1 |
| PCBs | | | |
| PCB-1016 | | | ND |
| PCB-1221 | | | ND |
| PCB-1232 | | | ND |
| PCB-1242 | | | ND |
| PCB-1248 | | | ND |
| PCB-1254 | | | ND |
| PCB-1260 | | | ND |
| Total PCBs | NA | NA | 0.0 |
| Total RCRA Metals | | | |
| Arsenic | NA | 0.25 | ND |
| Barium | 2 | 2 | 1.34 |
| Cadmium | 0.005 | 0.15 | ND |
| Chromium | 0.1 | 0.1 | 0.148 |
| Lead | 0.015 | 0.2 | 7.0 |
| Mercury | 0.002 | 0.0005 | 0.0052 |
| Selenium | 0.05 | NA | ND |
| Silver | NA | 0.1 | ND |
| Other | | | |
| Total Lead | 0.2 | 0.005 | 7.0 |
| Percent Moisture | NA | | 99.2 |

Key:

| | | |
|--------------|---|---|
| SDWA | = | Safe Drinking Water Act. |
| Illinois EPA | = | Illinois Environmental Protection Agency. |
| PCBs | = | Polychlorinated biphenyls. |
| ND | = | Not detected. |
| RCRA | = | Resource Conservation and Recovery Act. |
| NA | = | Not applicable. |
| mg/L | = | Milligrams per liter. |

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. SDWA regulatory limits are from Title 40, Code of Federal Regulations, Section 141.62.
3. Illinois EPA regulatory limits are from Title 35, Illinois Administrative Code, Section 304.124, except for mercury limit (304.126).

Source: Suburban Laboratories, Inc., Hillside, Illinois.

Appendix D

Validated Analytical Results

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: T-2 comp

Lab Order: 0003439

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 3:29:00 PM

Lab ID: 0003439-02A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | ND | | 1,070 | 3,220 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,070 | 3,220 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | ND | | 1,070 | 3,220 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 16,900 | | 1,070 | 3,220 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | ND | | 1,070 | 3,220 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 17,500 | | 1,070 | 3,220 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | ND | | 1,070 | 3,220 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 93.8 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 1.59 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.813 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | 0.0005 | J | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 14,100 | | 198 | 595 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 8.20 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 6.70 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: T-3 comp

Lab Order: 0003439

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 3:04:00 PM

Lab ID: 0003439-03A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 22,700 | | 1,270 | 3,800 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,270 | 3,800 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 22,700 | | 1,270 | 3,800 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 59,500 | | 1,270 | 3,800 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 31,000 | | 1,270 | 3,800 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 27,500 | | 1,270 | 3,800 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 9,260 | | 1,270 | 3,800 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 119 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 3.14 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.310 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 2,990 | | 234 | 703 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 6.01 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 21.1 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: T-4 comp

Lab Order: 0003439

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 3:15:00 PM

Lab ID: 0003439-04A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 16,100 | | 1,170 | 3,520 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,170 | 3,520 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 16,100 | | 1,170 | 3,520 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 43,600 | | 1,170 | 3,520 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 22,800 | | 1,170 | 3,520 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 16,300 | | 1,170 | 3,520 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 4,090 | | 1,170 | 3,520 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 116 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.36 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.829 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 10,800 | | 217 | 651 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 23.3 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 14.7 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment
Lab Order: 0003439
Project: # KJ0505 Name S05-0001-025/0J2501SIXX
Lab ID: 0003439-05A

Client Sample ID: T-5 comp
Tag Number:
Collection Date: 3/15/00 2:43:00 PM
Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 8,320 | | 1,100 | 3,300 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,100 | 3,300 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 8,320 | | 1,100 | 3,300 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | ND | | 1,100 | 3,300 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 8,920 | | 1,100 | 3,300 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | ND | | 1,100 | 3,300 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | ND | | 1,100 | 3,300 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 119 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.47 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.418 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | 0.0870 | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 4,140 | | 203 | 610 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 94.1 | | 0.750 | 2.22 | mg/L | 10 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 9.00 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: T-6 comp

Lab Order: 0003439

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 2:30:00 PM

Lab ID: 0003439-06A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 16,800 | | 1,190 | 3,570 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,190 | 3,570 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 16,800 | | 1,190 | 3,570 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | ND | | 1,190 | 3,570 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 20,100 | | 1,190 | 3,570 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | ND | | 1,190 | 3,570 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 4,100 | | 1,190 | 3,570 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 150 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.23 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.789 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 11,000 | | 220 | 660 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 59.8 | | 0.750 | 2.22 | mg/L | 10 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 15.9 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: T-6 Dup comp

Lab Order: 0003439

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 2:30:00 PM

Lab ID: 0003439-07A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|---------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 24,900 | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 24,900 | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | ND | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 31,800 | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | ND | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 3,640 | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 137 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.44 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.733 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | 0.00070 | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 10,200 | | 223 | 669 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 27.3 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 17.0 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: T-7 comp

Lab Order: 0003439

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 2:58:00 PM

Lab ID: 0003439-08A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 19,200 | | 1,250 | 3,740 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,250 | 3,740 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 19,200 | | 1,250 | 3,740 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | ND | | 1,250 | 3,740 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 31,500 | | 1,250 | 3,740 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | ND | | 1,250 | 3,740 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 5,940 | | 1,250 | 3,740 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 144 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.60 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.940 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 9,610 | | 231 | 692 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 10.4 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 19.8 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27 00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: T-8 comp

Lab Order: 0003439

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 3:02:00 PM

Lab ID: 0003439-09A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 11,600 | | 1,150 | 3,460 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,150 | 3,460 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 11,600 | | 1,150 | 3,460 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | ND | | 1,150 | 3,460 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 27,800 | | 1,150 | 3,460 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | ND | | 1,150 | 3,460 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 6,520 | | 1,150 | 3,460 | µg/Kg-dry | 10 | 3/27/00 |
| Surr. Tetrachloro-m-xylene | 121 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.82 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.844 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 30,600 | | 214 | 641 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 27.8 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 13.4 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: SED-1 comp

Lab Order: 0003439

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 10:53:00 AM

Lab ID: 0003439-10A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 10,500 | | 1,580 | 4,750 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,580 | 4,750 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 10,500 | | 1,580 | 4,750 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | ND | | 1,580 | 4,750 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 16,500 | | 1,580 | 4,750 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | ND | | 1,580 | 4,750 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 5,300 | | 1,580 | 4,750 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 106 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 4.52 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.419 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 7,370 | | 293 | 878 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 3.97 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 36.8 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: S-1 comp

Lab Order: 0003441

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 12:30:00 PM

Lab ID: 0003441-01A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | ND | | 1,530 | 4,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,530 | 4,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | ND | | 1,530 | 4,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 48,900 | | 1,530 | 4,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 32,200 | | 1,530 | 4,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 60,000 | | 1,530 | 4,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 37,200 | | 1,530 | 4,580 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 131 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 0.710 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 1.07 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 8,270 | | 282 | 847 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 1.18 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 34.5 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment
 Lab Order: 0003441
 Project: # KJ0505 Name S05-0001-025/0J2501SIXX
 Lab ID: 0003441-02A

Client Sample ID: S-2 comp
 Tag Number:
 Collection Date: 3/15/00 12:40:00 PM
 Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | ND | | 1,720 | 5,170 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,720 | 5,170 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | ND | | 1,720 | 5,170 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 41,600 | | 1,720 | 5,170 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 18,100 | | 1,720 | 5,170 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 14,600 | | 1,720 | 5,170 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 3,600 | J | 1,720 | 5,170 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 126 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 1.26 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.178 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 2,780 | | 319 | 957 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | ND | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 42.0 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: S-3 comp

Lab Order: 0003441

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 1:15:00 PM

Lab ID: 0003441-03A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 9,870 | | 1,150 | 3,450 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,150 | 3,450 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 9,870 | | 1,150 | 3,450 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 26,100 | | 1,150 | 3,450 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 1,300 | J | 1,150 | 3,450 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 14,500 | | 1,150 | 3,450 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 3,730 | | 1,150 | 3,450 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 119 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.52 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.366 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 2,170 | | 213 | 639 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 0.283 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 13.1 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: S-4 comp

Lab Order: 0003441

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 1:30:00 PM

Lab ID: 0003441-04A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 10,600 | | 1,070 | 3,210 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,070 | 3,210 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 10,600 | | 1,070 | 3,210 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 27,500 | | 1,070 | 3,210 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 14,200 | | 1,070 | 3,210 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 10,100 | | 1,070 | 3,210 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 2,900 | J | 1,070 | 3,210 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 112 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 1.77 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.274 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | 0.0005 | J | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 2,570 | | 198 | 594 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 0.879 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 6.60 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Lab Order: 0003441

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Lab ID: 0003441-05A

Client Sample ID: S-5 comp

Tag Number:

Collection Date: 3/15/00 1:45:00 PM

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 9,020 | | 1,330 | 3,990 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,330 | 3,990 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 9,020 | | 1,330 | 3,990 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 26,100 | | 1,330 | 3,990 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 13,600 | | 1,330 | 3,990 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 10,900 | | 1,330 | 3,990 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 4,340 | | 1,330 | 3,990 | µg/Kg-dry | 10 | 3/27/00 |
| Surr Tetrachloro-m-xylene | 125 | | 0 | 33 7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.40 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.336 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | SW6010B | | | | | Analyst: WC |
| Lead | 3,950 | | 246 | 738 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 0.14 | J | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 24.8 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: S-6 comp

Lab Order: 0003441

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 1:55:00 PM

Lab ID: 0003441-06A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 20,300 | | 1,300 | 3,900 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,300 | 3,900 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 20,300 | | 1,300 | 3,900 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 49,600 | | 1,300 | 3,900 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 25,600 | | 1,300 | 3,900 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 23,200 | | 1,300 | 3,900 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 13,000 | | 1,300 | 3,900 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 87.5 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.84 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.403 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 2.700 | | 240 | 721 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 1.39 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 23.0 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | 0.094 | J | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment
 Lab Order: 0003441
 Project: # KJ0505 Name S05-0001-025/0J2501SIXX
 Lab ID: 0003441-07A

Client Sample ID: S-7 comp
 Tag Number:
 Collection Date: 3/15/00 2:05:00 PM
 Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|---------------------|------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | SW8082 | | | | | | Analyst: JB |
| Aroclor 1016 | 8,600 | | 1,050 | 3,140 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,050 | 3,140 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 8,600 | | 1,050 | 3,140 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 19,400 | | 1,050 | 3,140 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 7,420 | | 1,050 | 3,140 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 5,490 | | 1,050 | 3,140 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 1,400 | J | 1,050 | 3,140 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 119 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | SW1311/6010B | | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | SW1311/6010B | | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | SW1311/6010B | | | | | | Analyst: WC |
| Barium | 1.97 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | SW1311/6010B | | | | | | Analyst: WC |
| Cadmium | 0.256 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | SW1311/6010B | | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | SW1311/7470A | | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | SW6010B | | | | | | Analyst: WC |
| Lead | 2,480 | | 194 | 581 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | SW1311/6010B | | | | | | Analyst: WC |
| Lead | 1.55 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | D2216 | | | | | | Analyst: JD |
| Percent Moisture | 4.50 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | SW1311/6010B | | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: S-8 comp

Lab Order: 0003441

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 2:20:00 PM

Lab ID: 0003441-08A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 13,100 | | 1,240 | 3,720 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,240 | 3,720 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 13,100 | | 1,240 | 3,720 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 30,000 | | 1,240 | 3,720 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 11,600 | | 1,240 | 3,720 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 6,040 | | 1,240 | 3,720 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 1,500 | J | 1,240 | 3,720 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 119 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 1.03 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.248 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 20.6 | | 2.30 | 6.89 | mg/Kg-dry | 1 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | ND | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 19.4 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment
Lab Order: 0003441
Project: # KJ0505 Name S05-0001-025/0J2501SIXX
Lab ID: 0003441-09A

Client Sample ID: B-6 comp
Tag Number:
Collection Date: 3/15/00 11:30:00 AM
Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | ND | | 1,320 | 3,960 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,320 | 3,960 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | ND | | 1,320 | 3,960 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 11,500 | | 1,320 | 3,960 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | ND | | 1,320 | 3,960 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 12,200 | | 1,320 | 3,960 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 5,030 | | 1,320 | 3,960 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 106 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 1.59 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.678 | | 0.0080 | 0.0240 | mg/L | 1 | 3/24/00 11:24:00 AM |
| CHROMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/24/00 11:24:00 AM |
| MERCURY BY CVAA, TCLP | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | SW6010B | | | | | Analyst: WC |
| Lead | 9,310 | | 244 | 732 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 4.82 | | 0.0750 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 24.2 | | 0 | 0 | wt% | 1 | 3/17/00 10:00:00 AM |
| SELENIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: B-6 Dup comp

Lab Order: 0003443

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 11:30:00 AM

Lab ID: 0003443-01A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | ND | | 1,320 | 3,970 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,320 | 3,970 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | ND | | 1,320 | 3,970 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 7,180 | | 1,320 | 3,970 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 5,890 | | 1,320 | 3,970 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 10,700 | | 1,320 | 3,970 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 4,330 | | 1,320 | 3,970 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 100 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 1.39 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.803 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 41,200 | | 245 | 735 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 4.91 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 24.5 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | 0.091 | J | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment
Lab Order: 0003443
Project: # KJ0505 Name S05-0001-025/0J2501SIXX
Lab ID: 0003443-02A

Client Sample ID: LC-I grab
Tag Number:
Collection Date: 3/15/00 11:23:00 AM
Matrix: AQUEOUS

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|----------------------------|--------|-----------------------|--------|----------|----------|----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | ND | | 12.5 | 37.5 | µg/L-dry | 1 | 3/22/00 6:35:00 AM |
| Aroclor 1221 | ND | | 12.5 | 37.5 | µg/L-dry | 1 | 3/22/00 6:35:00 AM |
| Aroclor 1232 | ND | | 12.5 | 37.5 | µg/L-dry | 1 | 3/22/00 6:35:00 AM |
| Aroclor 1242 | ND | | 12.5 | 37.5 | µg/L-dry | 1 | 3/22/00 6:35:00 AM |
| Aroclor 1248 | ND | | 12.5 | 37.5 | µg/L-dry | 1 | 3/22/00 6:35:00 AM |
| Aroclor 1254 | ND | | 12.5 | 37.5 | µg/L-dry | 1 | 3/22/00 6:35:00 AM |
| Aroclor 1260 | ND | | 12.5 | 37.5 | µg/L-dry | 1 | 3/22/00 6:35:00 AM |
| Surr: Tetrachloro-m-xylene | 102 | | 0 | 40.4-143 | %REC | 1 | 3/22/00 6:35:00 AM |
| SILVER BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/23/00 11:48:00 AM |
| ARSENIC BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/24/00 8:27:00 AM |
| BARIUM BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Barium | 1.34 | | 0.012 | 0.0360 | mg/L | 1 | 3/23/00 1:44:00 PM |
| CADMIUM BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Cadmium | ND | | 0.0080 | 0.0240 | mg/L | 1 | 3/22/00 9:05:00 AM |
| CHROMIUM BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Chromium | 0.148 | | 0.010 | 0.0300 | mg/L | 1 | 3/22/00 9:05:00 AM |
| MERCURY BY CVAA | | | | | | | |
| | | E245.1/SW7470A | | | | | Analyst: KC |
| Mercury | 0.0052 | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 7.00 | | 0.0740 | 0.222 | mg/L | 1 | 3/23/00 8:43:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 99.2 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/24/00 8:27:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment
 Lab Order: 0003446
 Project: # KJ0505 Name S05-0001-025/0J2501SIXX
 Lab ID: 0003446-01A

Client Sample ID: B-1 comp
 Tag Number:
 Collection Date: 3/15/00 10:40:00 AM
 Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|---------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 15,300 | | 1,470 | 4,420 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,470 | 4,420 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 15,300 | | 1,470 | 4,420 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 50,900 | | 1,470 | 4,420 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 40,800 | | 1,470 | 4,420 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 76,600 | | 1,470 | 4,420 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 18,800 | | 1,470 | 4,420 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 150 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.47 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.483 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | 0.015 | J | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | 0.013 | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 180,000 | | 273 | 819 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 3.40 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 32.2 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: B-2 comp

Lab Order: 0003446

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501S1XX

Collection Date: 3/15/00 10:50:00 AM

Lab ID: 0003446-02A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 7,400 | | 1,440 | 4,320 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,440 | 4,320 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 7,400 | | 1,440 | 4,320 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 39,700 | | 1,440 | 4,320 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 36,200 | | 1,440 | 4,320 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 57,300 | | 1,440 | 4,320 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 14,200 | | 1,440 | 4,320 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 75.0 | | 0 | 33 7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.08 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.919 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | SW6010B | | | | | Analyst: WC |
| Lead | 13,800 | | 266 | 799 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 2.86 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 30.5 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: B-3 comp

Lab Order: 0003446

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 11:00:00 AM

Lab ID: 0003446-03A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 1,900 | J | 1,180 | 3,550 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,180 | 3,550 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 1,900 | J | 1,180 | 3,550 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 9,170 | | 1,180 | 3,550 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 5,550 | | 1,180 | 3,550 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 17,600 | | 1,180 | 3,550 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 5,930 | | 1,180 | 3,550 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 144 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 3.46 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.644 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 13,200 | | 219 | 657 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 25.9 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 15.5 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: B-4 comp

Lab Order: 0003446

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501S1XX

Collection Date: 3/15/00 11:12:00 AM

Lab ID: 0003446-04A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 1,300 | J | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 1,300 | J | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 6,030 | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 6,450 | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 13,100 | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 5,440 | | 1,200 | 3,610 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 112 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | 0.24 | J | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 3.47 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.619 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | SW6010B | | | | | Analyst: WC |
| Lead | 10,500 | | 223 | 668 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 11.4 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 16.9 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: B-5 comp

Lab Order: 0003446

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 11:20:00 AM

Lab ID: 0003446-05A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | ND | | 1,200 | 3,590 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,200 | 3,590 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | ND | | 1,200 | 3,590 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | ND | | 1,200 | 3,590 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | ND | | 1,200 | 3,590 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 7,610 | | 1,200 | 3,590 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | ND | | 1,200 | 3,590 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 81.3 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | 0.16 | J | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.40 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.726 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 9,370 | | 221 | 664 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 29.4 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 16.4 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: B-7 comp

Lab Order: 0003446

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 12:00:00 PM

Lab ID: 0003446-06A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 2,700 | J | 1,290 | 3,870 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,290 | 3,870 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 2,700 | J | 1,290 | 3,870 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 12,600 | | 1,290 | 3,870 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 8,060 | | 1,290 | 3,870 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 16,300 | | 1,290 | 3,870 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 5,870 | | 1,290 | 3,870 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 81.3 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | 0.13 | J | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 2.00 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.963 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | SW6010B | | | | | Analyst: WC |
| Lead | 9,610 | | 239 | 716 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 14.3 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 22.5 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment
Lab Order: 0003446
Project: # KJ0505 Name S05-0001-025/0J2501SIXX
Lab ID: 0003446-07A

Client Sample ID: B-8 comp
Tag Number:
Collection Date: 3/15/00 12:10:00 PM
Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 3,000 | J | 1,190 | 3,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,190 | 3,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 3,000 | J | 1,190 | 3,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 11,700 | | 1,190 | 3,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 7,960 | | 1,190 | 3,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 11,500 | | 1,190 | 3,580 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 4,160 | | 1,190 | 3,580 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 96.9 | | 0 | 33.7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 1.08 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.602 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 9,230 | | 221 | 662 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 6.40 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 16.1 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment
Lab Order: 0003446
Project: # KJ0505 Name S05-0001-025/0J2501SIXX
Lab ID: 0003446-08A

Client Sample ID: B-9 comp
Tag Number:
Collection Date: 3/15/00 12:15:00 PM
Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 2,800 | J | 1,160 | 3,490 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,160 | 3,490 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 2,800 | J | 1,160 | 3,490 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 12,100 | | 1,160 | 3,490 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 9,140 | | 1,160 | 3,490 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 14,100 | | 1,160 | 3,490 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 5,360 | | 1,160 | 3,490 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 93.8 | | 0 | 33 7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | 0.082 | J | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 0.423 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.544 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 9,300 | | 215 | 646 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 16.3 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 14.1 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: B-10 comp

Lab Order: 0003446

Tag Number:

Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 12:25:00 PM

Lab ID: 0003446-09A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | 3,400 | J | 1,310 | 3,940 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1221 | ND | | 1,310 | 3,940 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1232 | 3,400 | J | 1,310 | 3,940 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1242 | 17,000 | | 1,310 | 3,940 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1248 | 8,860 | | 1,310 | 3,940 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1254 | 16,200 | | 1,310 | 3,940 | µg/Kg-dry | 10 | 3/27/00 |
| Aroclor 1260 | 15,000 | | 1,310 | 3,940 | µg/Kg-dry | 10 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 87.5 | | 0 | 33 7-156 | %REC | 10 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 3.33 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.555 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | ND | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 8,660 | | 243 | 729 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 2.03 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 23.9 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | ND | | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Suburban Laboratories, Inc.

Date: 31-Mar-00

CLIENT: Ecology & Environment

Client Sample ID: B-11 comp

Lab Order: 0003446

Tag Number:
Project: # KJ0505 Name S05-0001-025/0J2501SIXX

Collection Date: 3/15/00 12:30:00 PM

Lab ID: 0003446-10A

Matrix: SOLID

| Analyses | Result | Qual | MDL | Limit | Units | DF | Date Analyzed |
|------------------------------|--------|---------------------|--------|----------|-----------|-----|---------------------|
| PCBS | | | | | | | |
| | | SW8082 | | | | | Analyst: JB |
| Aroclor 1016 | ND | | 124 | 372 | µg/Kg-dry | 1 | 3/27/00 |
| Aroclor 1221 | ND | | 124 | 372 | µg/Kg-dry | 1 | 3/27/00 |
| Aroclor 1232 | ND | | 124 | 372 | µg/Kg-dry | 1 | 3/27/00 |
| Aroclor 1242 | ND | | 124 | 372 | µg/Kg-dry | 1 | 3/27/00 |
| Aroclor 1248 | ND | | 124 | 372 | µg/Kg-dry | 1 | 3/27/00 |
| Aroclor 1254 | ND | | 124 | 372 | µg/Kg-dry | 1 | 3/27/00 |
| Aroclor 1260 | ND | | 124 | 372 | µg/Kg-dry | 1 | 3/27/00 |
| Surr: Tetrachloro-m-xylene | 68.8 | | 0 | 33.7-156 | %REC | 1 | 3/27/00 |
| SILVER BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Silver | ND | | 0.007 | 0.0210 | mg/L | 1 | 3/27/00 3:34:00 PM |
| ARSENIC BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Arsenic | ND | | 0.080 | 0.240 | mg/L | 1 | 3/28/00 10:58:00 AM |
| BARIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Barium | 0.220 | | 0.012 | 0.0360 | mg/L | 1 | 3/28/00 8:11:00 AM |
| CADMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Cadmium | 0.825 | | 0.0080 | 0.0240 | mg/L | 1 | 3/28/00 9:15:00 AM |
| CHROMIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Chromium | ND | | 0.010 | 0.0300 | mg/L | 1 | 3/28/00 9:15:00 AM |
| MERCURY BY CVAA, TCLP | | | | | | | |
| | | SW1311/7470A | | | | | Analyst: KC |
| Mercury | 0.0033 | | 0.0002 | 0.00060 | mg/L | 1 | 3/24/00 2:30:00 AM |
| LEAD BY ICP | | | | | | | |
| | | SW6010B | | | | | Analyst: WC |
| Lead | 10.400 | | 230 | 689 | mg/Kg-dry | 100 | 3/27/00 8:10:00 AM |
| LEAD BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Lead | 2.50 | | 0.0750 | 0.222 | mg/L | 1 | 3/27/00 8:10:00 AM |
| PERCENT MOISTURE | | | | | | | |
| | | D2216 | | | | | Analyst: JD |
| Percent Moisture | 19.4 | | 0 | 0 | wt% | 1 | 3/20/00 12:00:00 PM |
| SELENIUM BY ICP, TCLP | | | | | | | |
| | | SW1311/6010B | | | | | Analyst: WC |
| Selenium | 0.091 | J | 0.0770 | 0.231 | mg/L | 1 | 3/28/00 10:58:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Appendix E

Response Option Cost Projections

Cost Projection for Response Option # 1
(Excavation, On-Site Stabilization and Off-Site Disposal)

Cost Summary

Page: 1

Projection Name: Midwest Metallica

Date: 04/25/00

Projection Type: Initial

Prime Contractor: 1.0%

| | Projection | Archive | Total |
|----------------------------------|------------|---------|---------|
| CONTRACTOR | | | |
| Personnel Cost | 237049 | 0 | 237049 |
| Equipment Cost | 279872 | 0 | 279872 |
| Other Direct Cost | 2363789 | 0 | 2363789 |
| | ----- | ----- | ----- |
| Total for Contractor | 2880710 | 0 | 2880710 |
| Contractor Contingency: 20.0% | | | 576142 |
| | | | ----- |
| Including Contractor Contingency | | | 3456852 |
| Site Contingency: 20.0% | | | 576142 |
| | | | ----- |
| Including Site Contingency | | | 4032994 |
| GOVERNMENT | | | |
| Personnel Cost | 61250 | 0 | 61250 |
| Equipment Cost | 0 | 0 | 0 |
| Other Direct Cost | 136 | 0 | 136 |
| | ----- | ----- | ----- |
| Total for Government | 61386 | 0 | 61386 |
| Site Contingency: 20.00% | | | 12277 |
| | | | ----- |
| Including Site Contingency | | | 73663 |
| | | | ===== |
| PROJECT TOTAL | | | 4106657 |

Cost Projection for Response Option # 2
(Excavation, On-Site Consolidation, Capping and Fencing)

Cost Summary

Page: 1

Projection Name: Midwest Metallics 2

Date: 04/25/00

Projection Type: Initial

Prime Contractor:

| CONTRACTOR | Projection | Archive | Total |
|----------------------------------|------------|---------|---------|
| Personnel Cost | 237049 | 0 | 237049 |
| Equipment Cost | 256097 | 0 | 256097 |
| Other Direct Cost | 1053426 | 0 | 1053426 |
| | ----- | ----- | ----- |
| Total for Contractor | 1546572 | 0 | 1546572 |
| Contractor Contingency:20.00% | | | 309314 |
| | | | ----- |
| Including Contractor Contingency | | | 1855886 |
| Site Contingency:20.00% | | | 309314 |
| | | | ----- |
| Including Site Contingency | | | 2165201 |
| GOVERNMENT | | | |
| Personnel Cost | 61250 | 0 | 61250 |
| Equipment Cost | 0 | 0 | 0 |
| Other Direct Cost | 136 | 0 | 136 |
| | ----- | ----- | ----- |
| Total for Government | 61386 | 0 | 61386 |
| Site Contingency: 20.00% | | | 12277 |
| | | | ----- |
| Including Site Contingency | | | 73663 |
| | | | ----- |
| PROJECT TOTAL | | | 2238864 |